

# FEDERAL AVIATION ADMINISTRATION AIRWORTHINESS DIRECTIVES LARGE AIRCRAFT

# **BIWEEKLY 2011-22**

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Federal Aviation Administration
Regulatory Support Division
Delegation and Airworthiness Programs Branch, AIR-140
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| AD No.                   | Information        | Manufacturer                   | Applicability   |
|--------------------------|--------------------|--------------------------------|---|
| Info                     | : E - Emergency; C | OR - Correction; S - Supersede | es; R - Revision; FR - Final Rule of Emergency  |
|                          |                    |                                |   |
| Biweekly 201             | 1-01               |                                |   |
| 2010-25-06               |                    | Boeing                         | 737-200, -300, -400, and -500 series  |
| 2010-26-05               |                    | Dassault Aviation              | Falcon 10, Fan Jet Falcon, Fan Jet Falcon Series C, D, E, F, and G,   |
|                          |                    |                                | Mystere-Falcon 20-C5, 20-D5, 20-E5, 20-F5, Mystere-Falcon 200, Mystere-Falcon 50, Mystere-Falcon 900, Falcon 900EX, Falcon          |
|                          |                    |                                | 2000 and Falcon 2000EX  |
| 2010-26-06               |                    | Boeing                         | 737-600, -700, -700C, -800, and -900 series   |
| 2010-26-07               |                    | Boeing                         | 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-   |
|                          |                    |                                | 200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP  |
|                          |                    |                                | series  |
| 2010-26-08               | 0.000 0.500        | Boeing                         | 767-200, -300, -300F, and -400ER series   |
| 2010-26-10               | S 2006-05-09       | Boeing                         | 747-200C, -200F, -400, -400D, and -400F series  |
| 2010-26-12<br>2010-26-13 |                    | Airbus<br>Bombardier           | A321-211, -212, -231, and -232<br>DHC-8-301, -311, and -315   |
| 2010-20-13               |                    | Bollibardiei                   | DHC-6-301, -311, and -313   |
| Biweekly 201             | 1-02               |                                |   |
| 2010-02-05               |                    | Airbus                         | See AD  |
| 2010-24-05               | COR                | Pratt & Whitney Canada         | Engine: PW305A and PW305B   |
| 2010-24-06               | S 2006-12-18       | Short Brothers PLC             | SD3-60 SHERPA, SD3-SHERPA, SD3-30, and SD3-60   |
| 2011-01-01               | S 2008-13-15       | Embraer                        | EMB-135BJ   |
| 2011-01-02               |                    | Airbus                         | A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -   |
| 2011 01 05               |                    | Daning                         | 323, -341, -342, 343, A340-211, -212, -213, -311, -312, and -313 727, 727C, 727-100, 727-100C, 727-200, and 727-200F                |
| 2011-01-05<br>2011-01-06 | S 2007-02-22       | Boeing<br>Airbus               | A310-203, -204, -221, -222, -304, -322, -324, and -325  |
| 2011-01-00               | 3 2007-02-22       | 328 Support Services GmbH      | 328-100 and -300  |
| 2011-01-08               |                    | 320 Support Services Chieff    | 320 100 and 300   |
| 2011-01-09               |                    | B/E Aerospace                  | Appliance: Protective breathing equipment (PBE) units   |
| 2011-01-10               |                    | Bombardier                     | BD-700-1A10 and BD-700-1A11   |
| 2011-01-11               |                    | Boeing                         | MD-90-30  |
| 2011-01-12               | S 2008-21-03       | Boeing                         | 737-300, -400, and -500 series  |
| 2011-01-13               |                    | Airbus                         | A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-  |
| •                        |                    |                                | 605R, F4-622R, and C4-605R Variant F  |
| 2011-01-15               |                    | Boeing                         | 757-200, -200CB, and -300 series  |
| 2011-01-16               |                    | Boeing                         | DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-  |
| 2011-02-01               |                    | Boeing                         | 87 (MD-87), and MD-88<br>MD-11 and MD-11F   |
| 2011-02-01               |                    | Boeing                         | 757-200, -200PF, -200CB, and -300 series  |
| 2011 02 03               |                    | Booms                          | 737 200, 20011, 2000B, and 300 series   |
| Biweekly 201             | 1-03               |                                |   |
| 2011-02-05               |                    | Boeing                         | 727, 727C, 727-100, 727-100C, 727-200, and 727-200F series  |
| 2011-02-06               |                    | Boeing                         | 767-300 series  |
| 2011-02-09               |                    | Airbus                         | A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, -343, A340-211, -212, -213, -311, - |
|                          |                    |                                | 312, and -313   |
| 2011-03-01               | S 2005-25-05       | Pratt & Whitney                | JT8D-7, -7A, -7B, -9, -9A, -11, -15, -15A, -17, -17A, -17R, and -   |
|                          |                    |                                | 17AR series   |

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|              |                     |                                     |   |
| Biweekly 201 | 1-04                |                                     |   |
| 2011-02-07   | S 2010-12-10        | General Electric                    | Engine: CF6-45A, CF6-45A2, CF6-50A, CF6-50C, CF6-50CA, CF6-50C1, CF6-50C2, CF6-50C2B, CF6-50C2D, CF6-50E, CF6-50E1, CF6-50E2, CF6-50C2-F and CF6-50C2-R                       |
| 2011-03-07   |                     | Fokker Services                     | F.28 Mark 1000, 2000, 3000, 4000, and F.28 Mark 0100  |
| 2011-03-08   |                     | Bombardier                          | CL-215-1A10 (CL-215), CL-215-6B11 (CL-215T Variant), and CL-215-6B11 (CL-415 Variant)   |
| 2011-03-09   |                     | Boeing                              | MD-90-30  |
| 2011-03-10   | S 2005-20-32        | Airbus                              | A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -   |
| 2011-03-11   |                     | Airbus                              | 323, -341, -342, -343, A340-211, -212, -213, -311, -312, and -313<br>A300 B4-601, B4-603, B4-620, B4-622, A300 B4-605R, B4-<br>622R, A300 F4-605R, and A300 C4-605R Variant F |
| 2011-03-12   |                     | Hawker Beechcraft                   | 400A and 400T   |
| 2011-03-13   |                     | Bombardier                          | CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900)  |
| 2011-03-14   |                     | Boeing                              | 737-100, -200, -200C, -300, -400, -500 series, and 737-400 series   |
| 2011-04-02   |                     | Hamilton Sundstrand                 | Propeller: 247F series  |
| Biweekly 201 | 1-05                |                                     |   |
| 2011-03-15   | 1 00                | Boeing                              | 767-200, -300, -300F, and -400ER series   |
| 2011-03-16   |                     | Cessna                              | 750   |
| 2011-04-01   |                     | Fokker                              | F.28 Mark 0070 and 0100   |
| 2011-04-03   |                     | Bombardier                          | CL-600-2B19 (Regional Jet Series 100 and 440)   |
| 2011-04-04   | S 2005-18-02        | Pratt & Whitney                     | Engine: JT8D-209, -217, -217A, -217C, and -219 turbofan   |
| 2011-04-05   |                     | Airbus                              | A340-211, -212, -213; A340-311, -312, -313; A340-541; and A340-642  |
| 2011-04-06   |                     | Airbus                              | A340-211, -212, -213; A340-311, -312, -313; A340-541; A340-642  |
| 2011-04-07   |                     | Fokker                              | F.28 Mark 0070 and 0100   |
| 2011-04-08   |                     | Learjet                             | 45  |
| 2011-04-10   | S 2009-23-10        | Boeing                              | 737-300, -400, and -500 series  |
| 2011-05-03   | S 2005-06-04        | Bombardier                          | CL-600-2B19 (Regional Jet Series 100 & 440)   |
| 2011-05-04   | S 2008-23-19        | Boeing                              | 757-200, -200CB, -200PF, and -300 series  |
| 2011-05-05   |                     | Airbus                              | A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, -343, A340-211, -212, -213, -311, -312, -313, -541, and -642                                |
| Biweekly 201 | 1-06                |                                     |   |
| 98-09-27R1   |                     | Rolls-Royce plc                     | Engine: RB211-Trent 768, 772, and 772B turbofan   |
| 2011-04-09   |                     | Transport Category Airplanes        | Transport Category Airplanes  |
| 2011-05-10   |                     | BAE Systems (Operations)<br>Limited | ATP, HS 748 2A and series 2B  |
| 2011-05-11   | S 2007-19-19        | Boeing                              | 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747SR, and 747SP series   |
| 2011-05-12   |                     | Boeing                              | 777-200, -200LR, -300, and -300ER series  |
| 2011-05-13   |                     | Saab AB, Saab Aerosystems           | SAAB 2000   |
| 2011-05-14   |                     | Bombardier                          | DHC-8-400, -401, and -402   |
| 2011-06-04   |                     | Airbus                              | A330-243F   |
|              |                     |                                     |   |

| AD No.   | nd 747SP<br>CC10<br>gional Jet<br>2, A300<br>R; and<br>04, -322,<br>-, 977-84, |
|--|--|
| Biweekly 2011-07   2011-06-03   Boeing   747-100, 747-100B, 747-100B SUD, 747-200B, 747-200   200F, 747-300, 747-400F, 747-400F, 747-80, 747-400F, 747-400F, 747-80, 747-400F,   | nd 747SP<br>CC10<br>gional Jet<br>2, A300<br>R; and<br>04, -322,<br>-, 977-84, |
| Boeing   | nd 747SP<br>CC10<br>gional Jet<br>2, A300<br>R; and<br>04, -322,<br>-, 977-84, |
| Boeing   | nd 747SP<br>CC10<br>gional Jet<br>2, A300<br>R; and<br>04, -322,<br>-, 977-84, |
| 200F, 747-300, 747-400, 747-400F, 747SR, as series  2011-06-05 S 2007-18-52 Boeing 737-600, -700, -700C, -800, -900, and -900ER series 2011-06-08 Bombardier CL-600-2B19 (Regional Jet Series 100 & 440), CL-600-2B19 (Regional Jet Series 100, 701, & 702), CL-600-2D15 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 700), 701, & 702), CL-600-2D15 (Regional Jet Series 900)  2011-06-09 S 2009-11-09 Airbus A300 B4-601, A300 B4-602, A300 B4-62Q, A300 B4-6 | nd 747SP<br>CC10<br>gional Jet<br>2, A300<br>R; and<br>04, -322,<br>-, 977-84, |
| 2011-06-08   | gional Jet<br>2, A300<br>R; and<br>04, -322,<br>-, 977-84,                     |
| (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Re Series 705) and CL-600-2D24 (Regional Jet Series 900)  2011-06-09 S 2009-11-09 Airbus A300 B4-601, A300 B4-603, A300 B4-6202, A300 B4-622, B300 B | gional Jet<br>2, A300<br>R; and<br>04, -322,<br>-, 977-84,                     |
| B4-605R, A300 B4-602R; A300 F4-605R, A300 F4-622R; A300 F4-605R, A300 F4-620R, A300 F4-605R, A300 F4-605R, A300 F4-620R, A300 F4-605R, A300 F4-605R, A300 F4-620R, A300 F4-605R, A300 F4 | R; and 04, -322, ., 977-84,  |
| 2011-06-11     Rolls-Royce plc     Boeing     Port & Boeing     S 2009-04-17     General Electric     S 2009-04-17     General Electric     S 2009-04-17     General Electric     S 2009-04-17     General Electric     Engine: CF6-45A, CF6-45A2, CF6-50A, CF6-50C, CF6-50C1, CF6-50C2, CF6-50C2B, CF6-50C2D, CF6-5 | -50CA,   |
| S 2009-04-17   General Electric   Engine: CF6-45A, CF6-50A, CF6-50C, CF6-50C1, CF6-50C1, CF6-50C2, CF6-50C2B, CF6-50C2D, CF6-50C2D   |  |
| CF6-50C1, CF6-50C2, CF6-50C2B, CF6-50C2D, CF6-50E2B  2011-07-02 S 2005-02-03 Pratt & Whitney Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2, and CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2, and CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2, and CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2B  Engine: JT8D-209, -217, -217A, -217C, and -219 series of SoE1, CF6-50E2B  Engine: JT8D-209, -217, -217A, -217A, -217A, -217C, and -219 series of SoE1, CF6-50E2B  Engine: JT8D-209, -217, -217A,  |  |
| Biweekly 2011-08  2011-07-02 S 2005-02-03 Pratt & Whitney Engine: JT8D-209, -217, -217A, -217C, and -219 series of the series of | ル, CF6-  |
| DC-9-14, DC-9-15, DC-9-21, DC-9-21, DC-9-31, DC-9-32F (C-9A), DC-9-32F (C-9A), DC-9-32F (C-9A), DC-9-32F (C-9A), DC-9-33F, DC-9-34F, DC- | urbofan  |
| 9-32 (VC-9C), DC-9-32F, DC-9-32F (C-9A), DC-9-32F (D-9-32F, DC-9-33F, DC-9-34F, DC-9-34F, DC-9-34F, DC-9-34F, DC-9-34F, DC-9-31F, DC-9-32F, DC-9-3 |  |
| 2011-07-06 Bombardier, Inc CL-600-2B19 (Regional Jet Series 100 & 440) 2011-07-07 Fokker Services B.V. F.28 Mark 1000, 2000, 3000, and 4000 2011-07-08 Airbus A340-211, -212, -213, -311, -312 and -313 2011-07-10 S 2010-10-18 Bombardier, Inc. BD-100-1A10 (Challenger 300) 2011-07-11 Dassault Aviation Mystere-Falcon 50 2011-08-51 E Boeing 737-300, -400, and -500 series  Biweekly 2011-09 2011-07-12 Fokker Services B.V. F.27 Mark 050  |  |
| 2011-07-07 Fokker Services B.V. F.28 Mark 1000, 2000, 3000, and 4000 2011-07-08 Airbus A340-211, -212, -213, -311, -312 and -313 2011-07-10 S 2010-10-18 Bombardier, Inc. BD-100-1A10 (Challenger 300) 2011-07-11 Dassault Aviation Mystere-Falcon 50 2011-08-51 E Boeing 737-300, -400, and -500 series  Biweekly 2011-09 2011-07-12 Fokker Services B.V. F.27 Mark 050   |  |
| 2011-07-08 Airbus A340-211, -212, -213, -311, -312 and -313 2011-07-10 S 2010-10-18 Bombardier, Inc. BD-100-1A10 (Challenger 300) 2011-07-11 Dassault Aviation Mystere-Falcon 50 2011-08-51 E Boeing 737-300, -400, and -500 series  Biweekly 2011-09 2011-07-12 Fokker Services B.V. F.27 Mark 050  |  |
| 2011-07-10 S 2010-10-18 Bombardier, Inc. BD-100-1A10 (Challenger 300) 2011-07-11 Dassault Aviation Mystere-Falcon 50 2011-08-51 E Boeing 737-300, -400, and -500 series  Biweekly 2011-09 2011-07-12 Fokker Services B.V. F.27 Mark 050  |  |
| 2011-07-11 Dassault Aviation Mystere-Falcon 50 2011-08-51 E Boeing 737-300, -400, and -500 series  Biweekly 2011-09 2011-07-12 Fokker Services B.V. F.27 Mark 050  |  |
| 2011-08-51 E Boeing 737-300, -400, and -500 series <b>Biweekly 2011-09</b> 2011-07-12 Fokker Services B.V. F.27 Mark 050   |  |
| 2011-07-12 Fokker Services B.V. F.27 Mark 050  |  |
| 2011-07-12 Fokker Services B.V. F.27 Mark 050  |  |
|  |  |
| 2011-08-02 Fokker Services B.V. F.27 Mark 050  |  |
| 2011-08-03 Airbus A340-541 and -642  |  |
| 2011-08-04 Bombardier, Inc CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-<br>(Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 705)  |  |
| 2011-08-05 Airbus A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-62 605R, F4-622R, A300 C4-605R Variant F, A310-203, -20   |  |
| 222, -304, -322, -324, and -325 2011-08-08 Embraer ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, ERJ 170- 200 SU, -200 STD, ERJ 190-100 STD, -100 LR, -100 EC  |  |
| IGW, ERJ 190-200 STD, -200 LR, and -200 IGW  | 1 6  |
| 2011-08-10 S 98-19-12 Rolls-Royce plc Engine: RB211-Trent 768-60 and RB211-Trent 772-60 t 2011-08-11 S 2005-13-19 BAE Systems (Operations) Limited BAe 146-100A, -200A, -300A, Avro 146-RJ70A, 146-RJ 146-RJ100A   |  |
| 2011-08-12 Airbus A330-301, -302, -303, -321, -322, -323, -341, -342, -343, 211, -212, -213, A340-311, -312, and -313  | A340-  |
| 2011-09-01 Airbus A340-541, and -642   |  |
| 2011-09-02 Saab AB, Saab Aerosystems 340A (SAAB/SF340A) and SAAB 340B  |  |
| 2011-09-03 Lockheed Martin Corp 382, 382B, 382E, 382F, and 382G  |  |
| 2011-09-05 Boeing 777-200, -300, and -300ER series   | 202  |
| 2011-09-06 S 2002-02-07 Airbus A330-201, -202, -203, -223, -223F, -243, -243F, -301, -30 321, -322, -323, -341, -342, -343, A340-211, -212, -213, -312, and -313   |  |

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|--------------|---|-----------------------------|--|--|--|--|
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|              |   |                             |  |  |  |  |
| Biweekly 201 | 1-10  |                             |  |  |  |  |
| 2011-08-07   |   | Rolls-Royce plc             | Engine: RB211-Trent 875-17, RB211-Trent 877-17, RB211-Trent                                    |  |  |  |
|              |   |                             | 884-17, RB211-Trent 884B-17, RB211-Trent 892-17, RB211-  |  |  |  |
|              |   |                             | Trent 892B-17, and RB211-Trent 895-17 turbofan   |  |  |  |
| 2011-09-07   |   | Rolls-Royce plc             | Engine: RB211-524G2-T-19, -524G3-T-19, -524H-T-36, -524H2-                                     |  |  |  |
|              |   |                             | T-19; RB211 Trent 553-61, 553A2-61, 556-61, 556A2-61, 556B-                                    |  |  |  |
|              |   |                             | 61, 556B2-61, 560-61, 560A2-61; RB211 Trent 768-60, 772-60,                                    |  |  |  |
|              |   |                             | 772B-60; RB211 Trent 875-17, 877-17, 884-17, 884B-17, 892-17,                                  |  |  |  |
| 2011 00 10   |   | A tulous                    | 892B-17, and 895-17 turbofan   |  |  |  |
| 2011-09-10   |   | Airbus                      | A300 B4-601, B4-603, B4-605R, C4-605R Variant F, and F4-                                       |  |  |  |
| 2011-09-11   |   | Boeing                      | 605R airplanes, and A310-204 and -304<br>777-200 and -300 series                               |  |  |  |
| 2011-09-11   |   | Bombardier, Inc.            | DHC-8-101, -102, -103, -106, -201, -202, -301, -311, -315, DHC-                                |  |  |  |
| 2011-07-12   |   | Bombardier, Inc.            | 8-401, and -402  |  |  |  |
| 2011-09-13   |   | Airbus                      | A340-211, -212, -213, -311, -312, and -313   |  |  |  |
| 2011-09-14   |   | Boeing                      | 747-200B, -300, -400, -400D, and -400F series  |  |  |  |
| 2011-09-15   |   | Boeing                      | 777-200, -200LR, -300, and -300ER series   |  |  |  |
| 2011-09-17   | S 2010-01-07  | Airbus                      | A340-211, -212, -213, -311, -312, -313, -541, and -642   |  |  |  |
| 2011-09-18   |   | Dassault Aviation           | FALCON 7X  |  |  |  |
| 2011-10-01   |   | Dassault Aviation           | FALCON 7X  |  |  |  |
| 2011-10-04   |   | Rolls-Royce plc             | Engine: RB211-Trent 875-17, -Trent 877-17, -Trent 884-17, -                                    |  |  |  |
|              |   |                             | Trent 884B-17, -Trent 892-17, -Trent 892B-17, and -Trent 895-17                                |  |  |  |
|              |   |                             | turbofan   |  |  |  |
| Biweekly 201 | 1_11  |                             |  |  |  |  |
| 2011-08-51   | 1-11  | Boeing                      | 737-300, -400, and -500 series   |  |  |  |
| 2011-09-04   |   | Lockheed Martin Corporation | 382, 382B, 382E, 382F, and 382G  |  |  |  |
| 2011-10-02   |   | Boeing                      | 747-400, 747-400D, and 747-400F series   |  |  |  |
| 2011-10-03   |   | Embraer                     | ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, ERJ 170-200 LR, -                                  |  |  |  |
|              |   |                             | 200 SU, -200 STD, ERJ 190-100 STD, ERJ 190-100 LR, ERJ 190-                                    |  |  |  |
|              |   |                             | 100 IGW, ERJ 190-200 STD, ERJ 190-200 LR, and ERJ 190-200                                      |  |  |  |
|              |   |                             | IGW  |  |  |  |
| 2011-10-05   |   | Airbus                      | A310-203, -204, -222, -304, -322, and -324   |  |  |  |
| 2011-10-06   |   | Airbus                      | A310-203, -204, -221, -222, -304, -322, -324, and -325   |  |  |  |
| 2011-10-07   | <b>2</b> 00 <b>2</b> 1 01   | Airbus                      | A310-203, -204, -221, -222, -304, -322, -324, and -325   |  |  |  |
| 2011-10-08   | S 98-26-01  | Airbus                      | A310-203, -204, -221, -222, -304, -322, -324, and -325   |  |  |  |
| 2011 10 10   | S 91-13-01  | A imbruo                    | A 200 D 4 601 D 4 602 D 4 620 D 4 622 D 4 605D D 4 622D D 4                                    |  |  |  |
| 2011-10-10   |   | Airbus                      | A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, and C4-605R Variant F |  |  |  |
| 2011-10-14   | S2010-24-08   | Dassault Aviation           | MYSTERE-FALCON 50  |  |  |  |
| 2011-10-14   | 52010-24-00   | Airbus                      | A318-112, A319-111, A319-112, A319-115, A319-132, A319-  |  |  |  |
| 2011 10 13   |   | Tinous                      | 133, A320-214, A320-232, A320-233, A321-211, A321-213, and                                     |  |  |  |
|              |   |                             | A321-231   |  |  |  |
| 2011-10-17   | S 2007-04-11  | Airbus                      | A300 B2-1A, B2-1C, B4-2C, B2K-3C, B4-103, B2-203, B4-203,                                      |  |  |  |
|              | S 2007-20-03  |                             | A310-203, -204, -221, -222, -304, -322, -324, 325, A300 B4-601,                                |  |  |  |
|              | S 2007-25-02  |                             | B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R,                                    |  |  |  |
|              |   |                             | A300 C4-605R Variant F   |  |  |  |
| 2011-11-02   |   | Bombardier, Inc.            | DHC-8-400, -401, and -402  |  |  |  |
|              |   |                             |  |  |  |  |

| AD No. | Information | Manufacturer | Applicability |
|--------|-------------|--------------|---------------|

Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency

| Biweekly 2011 | -12          |                          |  |
|---------------|--------------|--------------------------|--|
| 2010-24-13    | COR          | Boeing                   | 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747SR, and 747SP series  |
| 2011-07-06    | COR          | Bombardier, Inc.         | CL-600-2B19 (Regional Jet Series 100 & 440)  |
| 2011-11-05    | S 2007-15-05 | Boeing                   | DC-10-10, DC-10-10F, DC-10-15, DC-10-30, DC-10-30F (KC-  |
|               |              |                          | 10A and KDC-10), DC-10-40, DC-10-40F, MD-10-10F, MD-10-  |
|               |              |                          | 30F, MD-11, and MD-11F   |
| 2011-11-06    | S 2002-03-10 | BAE Systems (Operations) | BAe 146-100A, -200A, -300A, Avro 146-RJ70A, 146-RJ85A, and   |
|               |              | Limited                  | 146-RJ100A   |
| 2011-11-08    |              | Rolls-Royce plc          | Engine: RB211-535E4-37, -535E4-B-37, -535E4-B-75, and -535E4-C-37 turbofan   |
| 2011-12-01    |              | Koito Industries, Ltd.   | Appliance: Seats and seating systems   |
| 2011-12-51    | E            | Dassault Aviation        | FALCON 7X  |
|               |              |                          |  |
| Biweekly 2011 | -13          |                          |  |
| 2009-18-19 R1 |              | Airbus                   | A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -  |
|               |              |                          | 323, -341, -342, -343 series, A340-211, -212, -213, -311, -312, and -313 series  |
| 2011-12-05    |              | Boeing                   | 727, 727C, 727-100, 727-100C, 727-200, and 727-200F series   |
| 2011-12-06    |              | Bombardier, Inc.         | CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-   |
|               |              |                          | 2D15 (Regional Jet Series 705), and CL-600-2D24 (Regional Jet Series 900)  |
| 2011-12-09    |              | Boeing                   | 737-100, -200, -200C, -300, -400, and -500 series  |
| 2011-12-11    | S 2001-14-19 | Boeing                   | 767-200, -300, -300F series, 767-400ER series  |
| 2011-12-12    |              | Boeing                   | MD-90-30   |
| 2011-12-13    |              | Boeing                   | 737-600, -700, -700C, -800, -900, and -900ER series  |
| 2011-12-14    |              | Fokker Services B.V.     | F.28 Mark 0070 and 0100  |
| Biweekly 2011 | -14          |                          |  |
| 2011-08-09    | -17          | Embraer                  | EMB-120, -120ER, -120FC, -120QC, and -120RT  |
| 2011-12-51    |              | Dassault Aviation        | FALCON 7X  |
| 2011-13-04    |              | Rolls-Royce plc          | Engine: RB211-Trent 553-61, 553A2-61, 556-61, 556A2-61,  |
|               |              | • •                      | 556B-61, 556B2-61, 560-61, and 560A2-61 turbofan   |
| 2011-13-06    |              | Bombardier, Inc.         | DHC-8-400, -401, and -402  |
| 2011-13-07    | S 2010-02-02 | Dassault Aviation        | FALCON 7X  |
| 2011-13-08    |              | Bombardier, Inc.         | DHC-8-400, -401, and -402  |
| 2011-13-09    | S 2007-05-08 | Airbus                   | A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343   |
| 2011-13-10    | S 2009-11-13 | Learjet Inc              | 45   |
| 2011-13-11    | S 2007-06-18 | Airbus                   | A318-111, -112, -121, -122, A319-111, -112, -113, -114, -115, -131, -132, -133, A320-111, -211, -212, -214, -231, -232, -233; A321-111, -112, -131, -211, -212, -213, -231, and -232 |
|               |              |                          |  |

| AD No. | Information | Manufacturer | Applicability | Applicabilit |
|--------|-------------|--------------|---------------|--------------|

Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency

| Biweekly 2011                    | 15           |                           |   |
|----------------------------------|--------------|---------------------------|---|
| 2011-09-09                       | -13          | Bombardier, Inc.          | CL-600-2A12 (CL-601), CL-600-2B16 (CL-601-3A and CL-601-        |
| 2011 07 07                       |              | Bomourcier, me.           | 3R Variants), and CL-600-2B16 (CL-604 Variants)                 |
| 2011-12-13                       | COR          | Boeing                    | 737-600, -700, -700C, -800, -900, and -900ER series             |
| 2011-13-01                       |              | Rolls-Royce plc           | Engine: RB211-524D4-19, -524D4-B-19, -524D4-39, -524D4-B-       |
|                                  |              | J 1                       | 39, -524D4X-19, -524D4X-B-19, -524H-36, -524H2-19, -524H-T-     |
|                                  |              |                           | 36, -524H2-T-19, -524G2-19, -524G3-19, -524G2-T-19, and -       |
|                                  |              |                           | 524G3-T-19  |
| 2011-14-01                       |              | Airbus                    | A300 B4-601, B4-603, B4-620, B4-622; A300 B4-605R, B4-          |
|                                  |              |                           | 622R; A300 F4-605R, F4-622R; A300 C4-605R Variant F; A310-      |
|                                  |              |                           | 203, -204, -221, -222, -304, -322, -324, and -325               |
| 2011-14-03                       |              | Boeing                    | DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-        |
|                                  |              |                           | 87 (MD-87) and MD-88  |
| 2011-14-04                       |              | Dassault Aviation         | FALCON 7X   |
| 2011-14-08                       |              | B/E Aerospace             | Appliance: Continuous Flow Passenger Oxygen Mask Assembly       |
| 2011-14-10                       |              | Airbus                    | A330-342  |
| 2011-14-11                       |              | Boeing                    | 747-400 and -400D series  |
| 2011-14-12                       |              | Saab AB, Saab Aerosystems | SAAB 2000   |
| 2011-15-01                       |              | Boeing                    | DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-        |
|                                  | g 2000 20 04 |                           | 87 (MD-87), and MD-88   |
| 2011-15-02                       | S 2008-20-01 | Lockheed Martin           | 382, 382B, 382E, 382F, and 382G                                 |
| 2011-15-03                       | S 97-26-07   | Boeing                    | 747-100, -100B, -100B SUD, -200B, -200C, -200F, -300, -400, -   |
| 2011 17 06                       |              | C IEI .:                  | 400D, -400F, 747SR, and 747SP series                            |
| 2011-15-06                       |              | General Electric          | Engine: GE90-76B; GE90-77B; GE90-85B; GE90-90B; and             |
|                                  |              |                           | GE90-94B turbofan   |
| Biweekly 2011                    | -16          |                           |   |
| 2011-14-06                       | S 2007-20-05 | Airbus                    | A318-111, -112, -121, -122, A319-111, -112, -113, -114, -115, - |
|                                  |              |                           | 131, -132, -133, A320-111, -211, -212, -214, -231, -232, -233,  |
|                                  |              |                           | A321-111, -112, -131, -211, -212, -213, -231, and -232          |
| 2011-15-07                       |              | 328 Support Services GmbH | 328-100 and -300  |
| 2011-15-08                       |              | Airbus                    | A300 B4-601, B4-603, B4-620, B4-622, A300 B4-605R, B4-          |
|                                  |              |                           | 622R, A300 F4-605R, F4-622R, A300 C4-605R Variant F; A310-      |
|                                  |              |                           | 203, -204, -221, -222, -304, -322, -324, and -325               |
| 2011-15-09                       | S 2011-05-14 | Bombardier, Inc.          | DHC-8-400, -401, and -402                                       |
| 2011-16-02                       |              | Boeing                    | 747 and 767   |
| Di 1-1 2011                      | 17           |                           |   |
| <b>Biweekly 2011</b> -2011-09-09 | -17<br>Cor   | Bombardier, Inc.          | CL-600-2A12 (CL-601), CL-600-2B16 (CL-601-3A and CL-601-        |
| 2011-09-09                       | COI          | Bollibardier, Inc.        | 3R Variants), CL-600-2B16 (CL-604 Variants), and CL-600-2B16    |
|                                  |              |                           | (CL-604 Variants)   |
| 2011-14-07                       |              | Pratt & Whitney           | Engine: PW4074 and PW4077 turbofan                              |
| 2011-14-07                       | S 2011-12-51 | Dassault Aviation         | FALCON 7X   |
| 2011-16-03                       | 5 2011 12 31 | Airbus                    | See AD  |
| 2011-16-06                       |              | Boeing                    | 747-400 and -400F series  |
| 2011-17-02                       |              | Airbus                    | A320-214, -232, and -233  |
| 2011-17-03                       |              | Fokker Services B.V.      | F.28 Mark 1000, 2000, 3000, and 4000                            |
| 2011-17-10                       |              | Fokker Services B.V.      | F.28 Mark 1000, 2000, 3000, and 4000                            |
|                                  |              |                           |   |

|               |                    | LAKGE AIK                       | CRAFI  |
|---------------|--------------------|---------------------------------|--|
| AD No.        | Information        | Manufacturer                    | Applicability  |
| Info          | : E - Emergency; ( | COR - Correction; S - Supersede | es; R - Revision; FR - Final Rule of Emergency   |
| Biweekly 2011 | 1-18               |                                 |  |
| 2011-17-04    |                    | Bombardier                      | DHC-8-400, -401, and -402  |
| 2011-17-07    |                    | M7 Aerospace LP                 | SA226-T, SA226-T(B), SA226-TC, SA226-AT  |
|               | S 2006-09-07       | Airbus                          | A330-201, -202, -203, -223, -223F, -243, -243F, A330-301, -302, 303, -321, -322, -323, -341, -342, and -343  |
| 2011-17-09    |                    | Airbus                          | A330-201, -202, -203, -223, -223F, -243, -243F, A330-301, -302, 303, -321, -322, -323, -341, -342, and -343  |
| 2011-17-11    |                    | Boeing                          | DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), and MD-88  |
| 2011-17-12    |                    | Bombardier                      | CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705) and Model CL-600-2D24 (Regional Jet Series 900)                     |
| 2011-17-16    |                    | Airbus                          | A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303 321, -322, -323, -341, -342, -343, A340-311, -312, -313, A340-54 and -642                   |
| 2011-18-01    |                    | General Electric                | Engine: CF6-45A, CF6-45A2, CF6-50A, CF6-50C, CF6-50CA, CF6-50C1, CF6-50C2, CF6-50C2B, CF6-50C2D, CF6-50E, CF6-50E1, and CF6-50E2 series turbofan             |
| 2011-18-02    |                    | General Electric                | Engine: CF34-10E2A1; CF34-10E5; CF34-10E5A1; CF34-10E6<br>CF34-10E6A1; CF34-10E7; and CF34-10E7-B turbofan   |
| 2011-18-03    |                    | Boeing                          | 737-600, -700, -700C, -800, -900 series, 737-600, -700, -700C, -800, and -900 series   |
| 2011-18-05    |                    | Saab Ab, Saab Aerosystems       | SAAB 2000  |
| 2011-18-08    |                    | Bombardier                      | CL-600-2B19 (Regional Jet Series 100 & 440)  |
| 2011-18-51    | E                  | Honeywell International, Inc.   | Engine: TPE331   |
| Biweekly 2011 | 1-19               |                                 |  |
| 2005-25-10R1  | R 2005-25-10       | Dowty Propellers                | Propeller: R321/4-82-F/8, R324/4-82-F/9, R333/4-82-F/12, and R334/4-82-F/13  |
| 2011-18-04    |                    | Embraer                         | ERJ 170-100 LR, -100 STD, -100 SE, -100 SU; ERJ 170-200 LR 200 SU, -200; ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW ERJ 190-200 STD, -200 LR, and -200 IGW |
| 2011-18-14    |                    | Embraer                         | ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW; ERJ 190-200 STD, -200 LR, and -200 IGW   |

| 2011-18-14      |              | Embraer                             | ERJ 190-200 STD, -200 LR, and -200 IGW<br>ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW; ERJ 190-200<br>STD, -200 LR, and -200 IGW                  |
|-----------------|--------------|-------------------------------------|--|
| 2011-18-18      |              | Bombardier                          | DHC-8-400, -401, and -402  |
| Biweekly 2011-2 | 20           |                                     |  |
| 2011-08-07      | COR          | Rolls-Royce plc                     | Engine: RB211-Trent 875-17, RB211-Trent 877-17, RB211-Trent 884-17, RB211-Trent 884B-17, RB211-Trent 892-17, RB211-                                |
|                 |              |                                     | Trent 892B-17, and RB211-Trent 895-17 turbofa  |
| 2011-17-17      | S 2007-22-09 | Bombardier                          | DHC-8-400, -401, and -402  |
| 2011-18-13      | S 2008-10-51 | 328 Support Services GmbH           | 328-100 and -300   |
| 2011-18-15      |              | Bombardier                          | DHC-8-400, -401, and -402  |
| 2011-18-17      |              | Bombardier                          | DHC-8-400, -401, and -402  |
| 2011-18-20      |              | Airbus                              | A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -  |
|                 |              |                                     | 323, -341, -342, -343; A340-211, -212, -213, -311, -312, and -313  |
| 2011-18-22      |              | Airbus                              | A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -  |
|                 |              |                                     | 323, -341, -342, -343, A340-211, -212, -213, -311, -312, and -313  |
| 2011-18-23      | 0.0004.15.14 | Boeing                              | See AD   |
| 2011-19-01      | S 2004-15-14 | Airbus                              | See AD   |
| 2011-19-04      | S 2009-17-04 | Airbus                              | A318-111, -112, -121, -122; A319-111, -112, -113, -114, -115, -  |
|                 |              |                                     | 131, -132, -133; A320-111, -211, -212, -214, -231, -232, -233;   |
| 2011 20 02      |              | DAEG (O (')                         | A321-111, -112, -131, -211, -212, -213, -231, and -232   |
| 2011-20-02      |              | BAE Systems (Operations)<br>Limited | BAe 146-100A, -200A, -300A, Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A  |
| 2011-20-03      |              | Airbus                              | A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, C4-605R Variant F; A310-203, -204, -221, -222, -304, -322, -324, and -325 |
|                 |              |                                     |  |

| AD No. | Information | Manufacturer | Applicability | Applicabilit |
|--------|-------------|--------------|---------------|--------------|

Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency

| Biweekly 2011 | -21          |                             |   |
|---------------|--------------|-----------------------------|---|
| 2011-18-10    | S 2003-03-01 | Boeing                      | 737-600, -700, -700C, -800, -900, and -900ER series                       |
| 2011-19-02    |              | Dowty Propellers            | Propellers: R212/4-30-4/22 and R251/4-30-4/49                             |
| 2011-20-04    |              | Gulfstream Aerospace LP     | Galaxy and Gulfstream 200   |
| 2011-20-07    | S 2010-17-05 | Boeing                      | 737-600, -700, -700C, -800, and -900 series                               |
| 2011-20-09    |              | Airbus                      | See AD  |
| 2011-20-10    |              | Boeing                      | 737-600, -700, -700C, -800, -900, and -900ER series                       |
| D:1-1 2011    | . 22         |                             |   |
| Biweekly 2011 |              | ъ.                          | 7/7 200 200 200E 1 400ED '  |
| 2011-14-02    | S 2006-24-04 | Boeing                      | 767-200, -300, -300F, and -400ER series                                   |
| 2011-17-05    | S 90-01-10   | Airbus                      | A300 B2-1C, A300 B2-203, A300 B2K-3C, A300-B4-103, A300                   |
| 2011 21 01    |              |                             | B4-203, and A300 B4-2C  |
| 2011-21-01    |              | Fokker Services B.V.        | F.27 Mark 050, 200, 300, 400, 500, 600, and 700 airplanes; and            |
|               |              |                             | Fokker Services B.V. Model F.28 Mark 0070, 0100, 1000, 2000,              |
| 2011 21 02    |              |                             | 3000, and 4000  |
| 2011-21-02    |              | Airbus                      | A330-243F   |
| 2011-21-03    |              | Boeing                      | 777-200, -200LR, -300, and -300ER series                                  |
| 2011-21-04    | S 2006-12-16 | Bombardier                  | DHC-8-102, -103, -106, -201, -202, -301, -311, and -315                   |
| 2011-21-05    |              | Aviointeriors S.p.A.        | Appliance:Passenger seats   |
| 2011-21-06    | S 2009-10-02 | BAE Systems (Operations)    | 4101  |
|               |              | Limited                     |   |
| 2011-21-07    |              | Bombardier                  | CL-600-2B19 (Regional Jet Series 100 & 440), CL-600-2C10                  |
|               |              |                             | (Regional Jet Series 700, 701, & 702); CL-600-2D15 (Regional Jet          |
|               |              |                             | Series 705); and CL-600-2D24 (Regional Jet Series 900)                    |
| 2011-21-08    |              | Sicma Aero Seat             | Appliance: Passenger Seat Assemblies                                      |
| 2011-21-09    | S 2007-25-15 | Airbus                      | A300 B4-103, B4-203, and B4-2C  |
| 2011-21-14    | S 2008-03-04 | Airbus                      | A300 B4-601, B4-603, B4-620, and B4-622, A300 B4-605R, B4-                |
|               |              |                             | 622R, F4-605R, and F4-622R airplanes and A300 C4-605R                     |
|               |              |                             | Variant F   |
| 2011-21-15    |              | Embraer                     | EMB-135ER, -135KE, -135KL, and -135LR airplanes; and Model                |
|               |              |                             | EMB-145, -145ER, -145MR, -145LR, -145MP, and -145EP                       |
| 2011-22-01    |              | Rolls-Royce Deutschland Ltd | Engine: BR700-710A1-10, BR700-710A2-20, BR700-710C4-11 and BR700-710C4-11 |

# AIRWORTHINESS DIRECTIVE



www.faa.gov/aircraft/safety/alerts/ www.gpoaccess.gov/fr/advanced.html

**2011-14-02 The Boeing Company:** Amendment 39-16737. Docket No. FAA-2010-0033; Directorate Identifier 2009-NM-099-AD.

#### **Effective Date**

(a) This AD becomes effective November 16, 2011.

# **Affected ADs**

(b) This AD supersedes AD 2006-24-04, Amendment 39-14833, (71 FR 68432, November 27, 2006).

# **Applicability**

(c) This AD applies to all The Boeing Company Model 767-200, -300, -300F, and -400ER series airplanes, certificated in any category.

#### **Subject**

(d) Air Transport Association (ATA) of America Code 53: Fuselage.

#### **Unsafe Condition**

(e) This AD results from reported fatigue cracking in the vertical inner chord and the forward outer chord while doing the detailed inspection of the horizontal inner chord at STA 1809.5. The Federal Aviation Administration is issuing this AD to detect and correct fatigue cracking in the bulkhead structure at STA 1809.5 and the vertical inner chord at STA 1809.5, which could result in failure of the bulkhead structure for carrying the flight loads of the horizontal stabilizer, and consequent loss of controllability of the airplane.

# **Compliance**

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

# Restatement of Requirements of AD 2006-24-04 (71 FR 68432, November 27, 2006), With Updated Service Information

# **Repetitive Inspections and Corrective Actions**

(g) Before the accumulation of 15,000 total flight cycles, or within 3,000 flight cycles after January 2, 2007 (the effective date of AD 2006-24-04 (71 FR 68432, November 27, 2006)), whichever is later: Do the detailed and high frequency eddy current (HFEC) inspections for cracking as specified in Parts 1, 2, 3, and 4 of the Accomplishment Instructions of Boeing Alert Service Bulletin 767-53A0131, dated March 30, 2006; or Revision 1, dated March 12, 2009; and do all

corrective actions before further flight; by accomplishing all the actions specified in the Accomplishment Instructions of Boeing Alert Service Bulletin 767-53A0131, dated March 30, 2006; or Revision 1, dated March 12, 2009; except as provided by paragraph (h) of this AD. After the effective date of this AD, use only Boeing Alert Service Bulletin 767-53A0131, Revision 1, dated March 12, 2009. Repeat the inspections thereafter at intervals not to exceed 6,000 flight cycles. Accomplishing the corrective action for the inspections specified in Part 1, 2, 3, or 4, as applicable, of Boeing Alert Service Bulletin 767-53A0131, dated March 30, 2006; or Revision 1, dated March 12, 2009; as applicable; terminates the repetitive inspections for that area only.

# **Exceptions to Service Bulletin**

(h) If any cracking is found in the skin or in any structure other than the forward outer chord, horizontal inner chord, or vertical inner chord during any inspection required by paragraph (g) or (k) of this AD, and Boeing Alert Service Bulletin 767-53A0131, dated March 30, 2006; or Revision 1, dated March 12, 2009; specifies to contact Boeing for appropriate action: Before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (n) of this AD; except that repairing or replacing stringers in accordance with Subject 53-00-03–Fuselage Stringers, of the applicable SRM identified in table 1 of this AD is an acceptable method of compliance for those specific actions required by this AD.

# Optional Terminating Action for the Repetitive Inspections Required by Paragraph (g) of This AD

- (i) For airplanes on which no cracking is found during the most recent detailed and HFEC inspections for a specified area as required by paragraph (g) of this AD: Paragraphs (i)(1) through (i)(5) of this AD provide optional terminating action for the repetitive inspections required by paragraph (g) of this AD for the specified area only.
- (1) Modification of a specified area in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, terminates the repetitive inspections required by paragraph (g) of this AD for that area only.
- (2) Modification of a forward outer chord in accordance with the procedures specified in paragraphs (i)(2)(i) through (i)(2)(v) of this AD, as applicable, terminates the repetitive inspections required by paragraph (g) of this AD for that area only.
- (i) For Model 767-200 series airplanes: Steps 4.A through 4.C and Steps 4.G through 4.P of Repair 9, dated April 15, 2006, of Subject 53-80-08, Fuselage Bulkheads—Section 48, of the Boeing 767-200 Structural Repair Manual (SRM), Document D634T201.
- (ii) For Model 767-300 series airplanes: Steps 4.A through 4.C and Steps 4.G through 4.P of Repair 9, dated April 15, 2006, of Subject 53-80-08, Fuselage Bulkheads—Section 48, of the Boeing 767-300 SRM, Document D634T210.
- (iii) For Model 767-300F series airplanes: Steps 4.A through 4.C and Steps 4.G through 4.P of Repair 9, dated April 15, 2006, of Subject 53-80-08, Fuselage Bulkheads—Section 48, of the Boeing 767-300F SRM, Document D634T215.
- (iv) For Model 767-300BCF series airplanes: Steps 4.A through 4.C and Steps 4.G through 4.P of Repair 9, dated April 15, 2006, of Subject 53-80-08, Fuselage Bulkheads–Section 48, of the Boeing 767-300BCF SRM, D634T235.
- (v) For Model 767-400 series airplanes: Steps 4.A through 4.C and Steps 4.G through 4.P of Repair 9, dated April 15, 2006, of Subject 53-80-08, Fuselage Bulkheads—Section 48, of the Boeing 767-400 SRM, Document D634T225.
- (3) Modification of a forward outer chord in accordance with Steps 4.A through 4.C and 4.G through 4.P of Repair 9 of Subject 53-80-08, Fuselage Bulkheads–Section 48, of the applicable SRM identified in table 1 of this AD also terminates the repetitive inspections required by paragraph (g) of this AD for that area.

- (4) Modification of a horizontal inner chord in accordance with the procedures specified in paragraphs (i)(4)(i) through (i)(4)(v) of this AD, as applicable, terminates the repetitive inspections required by paragraph (g) of this AD for that area.
- (i) For Model 767-200 series airplanes: Steps 4.A, 4.B, and 4.F through 4.P of Repair 10, dated April 15, 2006, of Subject 53-80-08, Fuselage Bulkheads—Section 48, of the Boeing 767-200 SRM, Document D634T201.
- (ii) For Model 767-300 series airplanes: Steps 4.A, 4.B, and 4.F through 4.P of Repair 10, dated April 15, 2006, of Subject 53-80-08, Fuselage Bulkheads—Section 48, of the Boeing 767-300 SRM, Document D634T210.
- (iii) For Model 767-300F series airplanes: Steps 4.A, 4.B, and 4.F through 4.P of Repair 10, dated April 15, 2006, of Subject 53-80-08, Fuselage Bulkheads—Section 48, of the Boeing 767-300F SRM, Document D634T215.
- (iv) For Model 767-300BCF series airplanes: Steps 4.A, 4.B, and 4.F through 4.P of Repair 10, dated April 15, 2006, of Subject 53-80-08, Fuselage Bulkheads–Section 48, of the Boeing 767-300BCF SRM, Document D634T235.
- (v) For Model 767-400 series airplanes: Steps 4.A, 4.B, and 4.F through 4.P of Repair 10, dated April 15, 2006, of Subject 53-80-08, Fuselage Bulkheads–Section 48, of the Boeing 767-400 SRM, Document D634T225.
- (5) Modification of a horizontal inner chord in accordance with Steps 4.A, 4.B, and 4.F through 4.P of Repair 10 of Subject 53-80-08, Fuselage Bulkheads—Section 48, of the applicable SRM identified in Table 1 of this AD also terminates the repetitive inspections required by paragraph (g) of this AD for that area.

| SRM                                      | Revision | Date              |  |  |
|--|----------|-------------------|--|--|
| Boeing 767-200 SRM, Document D634T201    | 105      | December 15, 2010 |  |  |
| Boeing 767-300 SRM, Document D634T210    | 85       | December 15, 2010 |  |  |
| Boeing 767-300F SRM, Document D634T215   | 49       | December 15, 2010 |  |  |
| Boeing 767-300BCF SRM, Document D634T235 | 9        | December 15, 2010 |  |  |
| Boeing 767-400 SRM, Document D634T225    | 32       | December 15, 2010 |  |  |

**Table 1–Revised SRMs** 

Note 1: We have reformatted paragraph (i) of this AD to differentiate the methods of compliance specified in that paragraph.

#### **Credit for Previously Accomplished Repairs**

(j) Repair of a forward outer chord done before January 2, 2007, in accordance with Repair 9, dated April 15, 2006, of Subject 53-80-08, Fuselage Bulkheads—Section 48, of the Boeing 767-200 SRM, Document D634T201; Boeing 767-300 SRM, Document D634T210; Boeing 767-300F SRM, Document D634T215; Boeing 767-300BCF SRM, D634T235; or Boeing 767-400 SRM, Document D634T225; as applicable; is acceptable for compliance with the requirements of paragraph (g) of this AD for that area only. Repair of a horizontal inner chord before January 2, 2007, in accordance with Repair 10, dated April 15, 2006, of Subject 53-80-08, Fuselage Bulkheads—Section 48, of the Boeing 767-200 SRM, Document D634T201; Boeing 767-300 SRM, Document D634T210; Boeing 767-300F SRM, Document D634T215; Boeing 767-300BCF SRM, Document D634T235; or Boeing 767-400 SRM, Document D634T225; as applicable; is acceptable for compliance with the terminating requirements of paragraph (g) of this AD for that area only.

# **New Requirements of This AD**

#### **Inspections**

- (k) At the later of the times specified in paragraphs (k)(1) and (k)(2) of this AD: Do the detailed and HFEC inspections for cracking as specified in Parts 5 and 6 of the Accomplishment Instructions of Boeing Alert Service Bulletin 767-53A0131, Revision 1, dated March 12, 2009; and do all applicable corrective actions by accomplishing all the actions specified in the Accomplishment Instructions of Boeing Alert Service Bulletin 767-53A0131, Revision 1, dated March 12, 2009; except as provided by paragraph (h) of this AD. Do all applicable corrective actions before further flight. Repeat the inspections thereafter at intervals not to exceed 6,000 flight cycles. Accomplishing the corrective action for the inspections specified in Part 5 or 6 of the Accomplishment Instructions of Boeing Alert Service Bulletin 767-53A0131, Revision 1, dated March 12, 2009, as applicable, terminates the repetitive inspections for that area only.
- (1) Before the accumulation of 15,000 total flight cycles or within 6,000 flight cycles after the inspection required by paragraph (g) of this AD, whichever occurs later.
  - (2) Within 30 days after the effective date of this AD.

# Optional Terminating Action for the Repetitive Inspections Required by Paragraph (k) of This AD

- (l) For airplanes on which no cracking is found during the most recent detailed and HFEC inspections for a specified area, as required by paragraph (k) of this AD: Paragraphs (l)(1) and (l)(2) of this AD provide optional terminating action for the repetitive inspections required by paragraph (k) of this AD for that area only. After the effective date of this AD, only the applicable SRM identified in table 1 of this AD or a method approved by the Manager, Seattle ACO, may be used.
- (1) Modify the specified area in accordance with Steps 4.A through 4.C and 4.G through 4.Q of Repair 11 of Subject 53-80-08, Fuselage Bulkheads—Section 48, of the applicable SRM identified in table 1 or table 2 of this AD, except as provided by paragraph (m) of this AD.
- (2) Modify the specified area in accordance with a method approved by the Manager, Seattle ACO.

**Table 2-Previous SRMs** 

| Steps –  | Dated –         | Of –  |
|--|-----------------|---|
| 4.A through 4.C and 4.G through 4.Q of Repair 11 of Subject 53-80-08 | August 15, 2008 | Boeing 767-200 SRM,<br>Document D634T201    |
| 4.A through 4.C and 4.G through 4.Q of Repair 11 of Subject 53-80-08 | August 15, 2008 | Boeing 767-300 SRM,<br>Document D634T210    |
| 4.A through 4.C and 4.G through 4.Q of Repair 11 of Subject 53-80-08 | August 15, 2008 | Boeing 767-300F SRM,<br>Document D634T215   |
| 4.A through 4.C and 4.G through 4.Q of Repair 11 of Subject 53-80-08 | August 15, 2008 | Boeing 767-300BCF SRM,<br>Document D634T235 |
| 4.A through 4.C and 4.G through 4.Q of Repair 11 of Subject 53-80-08 | August 15, 2008 | Boeing 767-400 SRM,<br>Document D634T225    |

Note 2: We have reformatted paragraph (l) of this AD to differentiate the methods of compliance specified in that paragraph.

# Exception to SRM Modification Specified in Paragraph (I) of This AD

(m) If, during accomplishment of any modification in accordance with paragraph (l) of this AD, any cracking is found and the applicable SRM referenced in paragraph (l) of this AD specifies to contact Boeing for appropriate action: Before further flight, repair the cracking in accordance with a method approved by the Manager, Seattle ACO. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

# **Alternative Methods of Compliance (AMOCs)**

- (n)(1) The Manager, Seattle ACO, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.
- (2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.
- (3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD, if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.
- (4) AMOCs approved previously in accordance with AD 2006-24-04 (71 FR 68432, November 27, 2006) are approved as AMOCs for the corresponding provisions of this AD.

# **Material Incorporated by Reference**

- (o) You must use the service information specified in paragraph (o)(1) of this AD to do the actions required by this AD, unless the AD specifies otherwise. If you accomplish the optional actions specified by this AD, you must use the service information specified in paragraph (o)(2) of this AD to perform those actions, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51 of the following service information on November 16, 2011:
  - (1) Boeing Alert Service Bulletin 767-53A0131, Revision 1, dated March 12, 2009.
- (2) Subject 53-00-03, Fuselage Stringers, of Chapter 53, Fuselage; or Subject 53-80-08, Fuselage Bulkheads—Section 48, Repair 9—Station 1809.5 Bulkhead—Forward Outer Chord Repair Between S-4 to S-8, Repair 10—Station 1809.5 Bulkhead—Horizontal Inner Chord Repair at Approximately WL 257 and BL 28, or Repair 11—Station 1809.5 Bulkhead—Vertical Inner Chord Repair at Approximately WL 256 and BL 30, as applicable, of Chapter 53, Fuselage; as applicable; of the applicable Structural Repair Manual (SRM) specified in paragraphs (o)(2)(i) through (o)(2)(v) of this AD.
- (i) Boeing 767-200 SRM, Document D634T201, Revision 105, dated December 15, 2010. Only the transmittal letter, dated December 15, 2010, of this document contains the revision level of the document.
- (ii) Boeing 767-300 SRM, Document D634T210, Revision 85, dated December 15, 2010. Only page 1 of the transmittal letter, dated December 15, 2010, of this document contains the revision level of the document.
- (iii) Boeing 767-300F SRM, Document D634T215, Revision 49, dated December 15, 2010. Only page 1 of the transmittal letter, dated December 15, 2010, of this document contains the revision level of the document.

- (iv) Boeing 767-300BCF SRM, Document D634T235, Revision 9, dated December 15, 2010. Only page 1 of the transmittal letter, dated December 15, 2010, of this document contains the revision level of the document.
- (v) Boeing 767-400 SRM, Document D634T225, Revision 32, dated December 15, 2010. Only page 1 of the transmittal letter, dated December 15, 2010, of this document contains the revision level of the document.
- (3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; e-mail me.boecom@boeing.com; Internet https://www.myboeingfleet.com.
- (4) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.
- (5) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

Issued in Renton, Washington, on September 23, 2011. Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service.

# AIRWORTHINESS DIRECTIVE



www.faa.gov/aircraft/safety/alerts/ www.gpoaccess.gov/fr/advanced.html

**2011-17-05 Airbus:** Amendment 39-16769. Docket No. FAA-2011-0389; Directorate Identifier 2007-NM-189-AD.

# **Effective Date**

(a) This airworthiness directive (AD) becomes effective November 16, 2011.

# **Affected ADs**

(b) This AD supersedes AD 90-01-10, Amendment 39-6448 (55 FR 261, January 4, 1990).

# **Applicability**

(c) This AD applies to Airbus Model A300 B2-1C, A300 B2-203, A300 B2K-3C, A300-B4-103, A300 B4-203, and A300 B4-2C airplanes; certificated in any category; serial numbers 0003 through 0156 inclusive.

#### **Subject**

(d) Air Transport Association (ATA) of America Code 53: Fuselage.

#### Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

This Airworthiness Directive (AD) is issued in order to prevent cracks development in sections 13 to 18 of the fuselage between rivets of longitudinal lap joints between frames 18 and 80 which could affect the structural integrity of the fuselage if not corrected.

# This new AD:

- -Retains the requirements of DGAC AD 1989-061-092(B)R4 [which corresponds to FAA AD 90-10-10 (55 FR 261, January 4, 1990)], which is cancelled;
- -Takes into account a new inspection program as detailed in AIRBUS Service Bulletins (SB) A300-53-0211 Revision 7, which will allow A300 aircraft to reach the Limit of Validity (LOV).

This AD has been republished to correctly refer to SB A300-53-0211 in Note 2 of the Compliance section.

The inspection program consists of repetitive detailed inspections for disbonding and cracking of the fuselage inner doubler; eddy current and ultrasonic inspections of the fuselage longitudinal lap joints for cracking; and repair if necessary (i.e., repairing any cracking or disbonding, or contacting Airbus for repair instructions and doing the repair).

# **Compliance**

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

# Repetitive Inspections of "Special Areas" and Repair or Modification if Necessary

(g) For airplanes on which an eddy current inspection of the "special" areas of the longitudinal lap joints has not been done as of the effective date of this AD in accordance with Airbus Mandatory Service Bulletin A300-53-0211: Prior to the accumulation of 24,000 total flight cycles, or within 2,000 flight cycles after the effective date of this AD, whichever occurs later; do an eddy current inspection for cracking of the "special" areas of the longitudinal lap joints, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-53-0211, Revision 07, dated December 1, 2006. If no cracking is found, repeat the inspection thereafter at the applicable intervals specified in Table 1 of this AD. If any crack is found during any inspection required by this paragraph, repair or modify before further flight, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-53-0211, Revision 07, dated December 1, 2006; and do the applicable inspection of the repaired or modified area in accordance with paragraph (k) of this AD. "Special" areas of the longitudinal lap joints are defined in Airbus Mandatory Service Bulletin A300-53-0211, Revision 07, dated December 1, 2006.

Table 1-Repetitive Intervals for Inspecting Special Areas of the Longitudinal Lap Joints

| For Airplanes – | Inspect Special Area –               | Repeat At Intervals Not to<br>Exceed – |
|-----------------|--------------------------------------|--|
| All             | STGR5 LH and RH (FR54 through FR58)  | 3,600 flight cycles                    |
| All             | STGR22 LH and RH (FR26 through FR40) | 2,700 flight cycles                    |
| All             | STGR22 RH (FR58 through FR65)        | 3,000 flight cycles                    |
| All             | STGR31 LH/RH (FR26 through FR39)     | 3,000 flight cycles                    |
| MSN 0003        | STGR31 LH/RH (FR54 through FR58)     | 3,600 flight cycles                    |

(h) For airplanes on which an eddy current inspection of the "special" areas of the longitudinal lap joints has been done before the effective date of this AD in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-53-0211; except for airplanes on which a repair or modification of the "special" areas has been done in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-53-0211: Do the next inspection of the "special" areas of the longitudinal lap joints at the earlier of the times specified in paragraphs (h)(1) and (h)(2) of this AD, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-53-0211, Revision 07, dated December 1, 2006. If no cracking is found, repeat the inspection thereafter at the applicable intervals specified in Table 2 of this AD. If any crack is found during any inspection required by this paragraph, repair or modify before further flight, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-53-0211, Revision 07, dated December 1, 2006, and do the applicable inspection of the repaired or modified area in accordance with paragraph (k) of this AD. "Special" areas of the longitudinal lap

joints are defined in Airbus Mandatory Service Bulletin A300-53-0211, Revision 07, dated December 1, 2006.

- (1) Within 6,000 flight cycles after doing the last inspection of the "special" areas of the longitudinal lap joints, in accordance with Airbus Mandatory Service Bulletin A300-53-0211, Revision 07, dated December 1, 2006.
- (2) Within the applicable intervals specified in Table 2 of this AD, or within 60 days after the effective date of this AD, whichever occurs later.

Table 2-Repetitive Intervals for Inspecting Special Areas of the Longitudinal Lap Joints

| For Airplanes – | Inspect Special Area –               | Repeat At Intervals Not<br>to Exceed – |
|-----------------|--------------------------------------|--|
| All             | STGR5 LH and RH (FR54 through FR58)  | 3,600 flight cycles                    |
| All             | STGR22 LH and RH (FR26 through FR40) | 2,700 flight cycles                    |
| All             | STGR22 RH (FR58 through FR65)        | 3,000 flight cycles                    |
| All             | STGR31 LH/RH (FR26 through FR39)     | 3,000 flight cycles                    |
| MSN 0003        | STGR31 LH/RH (FR54 through FR58)     | 3,600 flight cycles                    |

# Repetitive Inspections of "Standard Areas" and Repair or Modification if Necessary

(i) For airplanes on which an eddy current inspection of the "standard" areas of the longitudinal lap joints has not been done before the effective date of this AD in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-53-0211: At the applicable time specified in Tables 3 and 4 of this AD, do an eddy current inspection for cracking of the longitudinal lap joints in the "standard" areas, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-53-0211, Revision 07, dated December 1, 2006. Repeat the inspection thereafter at the applicable intervals specified in Tables 3 and 4 of this AD. If any crack is found during any inspection required by this paragraph, repair or modify before further flight, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-53-0211, Revision 07, dated December 1, 2006, and do the applicable inspection of the applicable area specified in Tables 3 and 4 of this AD. "Standard" areas of the longitudinal lap joints are defined in Airbus Mandatory Service Bulletin A300-53-0211, Revision 07, dated December 1, 2006.

Table 3-Initial Compliance Times and Repetitive Intervals for Inspecting Standard Areas of the Longitudinal Lap Joints

| For<br>Airplanes – | Before the<br>Accumulation<br>of – | Inspect Standard Area –                                | Repeat At<br>Intervals Not to<br>Exceed – |
|--------------------|------------------------------------|--|---|
| All                | 32,000 total flight cycles         | STGR5, 13, 22 LH and RH, STGR31 LH (FR18 through FR26) | 3,600 flight cycles                       |
| All                | 32,000 total flight cycles         | STGR27 RH, STGR39 RH (FR18 through FR20A, FR25A, FR26) | 8,000 flight cycles                       |
| All                | 32,000 total flight cycles         | STGR43 LH, STGR46 RH, STGR51 LH (FR19 through FR26)    | 5,700 flight cycles                       |

| All                    | 32,000 total flight cycles | STGR5 LH/RH (FR26 through FR40)<br>STGR11 LH/RH (FR27 through FR32)<br>STGR13 LH/RH (FR 26 through FR28, FR31<br>through FR40)<br>STGR27 LH/RH (FR 27 through FR32)<br>STGR43 LH/RH (FR 26 through FR39)<br>STGR49 RH (FR26 through FR39) | 3,000 flight cycles |
|------------------------|----------------------------|---|---------------------|
| All                    | 32,000 total flight cycles | STGR47 LH (FR26 through FR39)   | 5,700 flight cycles |
| All                    | 32,000 total flight cycles | STGR5, 13, 22 LH/RH (FR40 through FR54)   | 5,000 flight cycles |
| All except<br>MSN 0003 | 32,000 total flight cycles | STGR13, 44, 52 LH/RH (FR54 through FR58)<br>STGR22 LH/RH (FR54, FR55)<br>STGR31 LH/RH (FR54 through FR58)   | 3,600 flight cycles |

(j) For airplanes on which an eddy current inspection of the "standard" areas of the longitudinal lap joints has been done as of the effective date of this AD in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-53-0211; except for airplanes on which a repair or modification of the "standard areas" has been done in accordance with Airbus Mandatory Service Bulletin A300-53-0211: Do the next inspection of the "standard" areas of the longitudinal lap joints at the earlier of the times specified in paragraphs (j)(1) and (j)(2) of this AD, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-53-0211, Revision 07, dated December 1, 2006. Thereafter, if no cracking is found, repeat the inspection at the applicable intervals specified in Tables 3 and 4 of this AD. If any crack is found during any inspection required by this paragraph, repair or modify before further flight, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-53-0211, Revision 07, dated December 1, 2006, and do the applicable inspection of the repaired or modified area in accordance with paragraph (k) of this AD. "Standard" areas of the longitudinal lap joints are defined in Airbus Mandatory Service Bulletin A300-53-0211, Revision 07, dated December 1, 2006.

Table 4–Initial Compliance Times and Repetitive Intervals for Inspecting Additional Standard Areas of the Longitudinal Lap Joints

| For<br>Airplanes – | Before the<br>Accumulation<br>of – | Inspect Standard Area –  | Repeat At<br>Intervals Not to<br>Exceed – |
|--------------------|------------------------------------|--|---|
| Pre-Mod<br>1398    | 32,000 total flight cycles         | STGR5, 13 LH/RH 22 LH (FR58 through FR65)<br>STGR31 LH (FR58 through FR72)<br>STGR31 RH (FR65 through FR72)  | 2,700 flight cycles                       |
| All                | 32,000 total flight cycles         | STGR27 RH, STGR39 RH (FR58, FR59A, FR63A through FR65)   | 8,000 flight cycles                       |
| Post-Mod<br>1398   | 32,000 total flight cycles         | STGR5, 13 LH/RH 22 LH (FR58 through FR65)<br>STGR31 LH (FR58 through FR72)<br>STGR 31 RH (FR65 through FR72) | 3,000 flight cycles                       |
| Pre-Mod<br>1398    | 32,000 total flight cycles         | STGR5, 13, 22 LH/RH (FR65 through FR72)  | 2,300 flight cycles                       |

| Post-Mod<br>1398 | 32,000 total flight cycles | STGR5, 13, 22 LH/RH (FR65 through FR72)   | 3,000 flight cycles |
|------------------|----------------------------|---|---------------------|
| All              | 32,000 total flight cycles | STGR44 LH (FR58 through FR72)<br>STGR52 LH/RH (FR58 through FR65)<br>STGR47 RH (FR58 through FR72)<br>STGR57 LH (FR65 through FR72) | 3,000 flight cycles |
| All              | 24,000 total flight cycles | STGR22 RH (FR58 through FR65)   | 3,000 flight cycles |
| All              | 32,000 total flight cycles | STGR6 LH/RH (FR72 through FR80)<br>STGR24 LH/RH (FR76 through FR80)   | 3,000 flight cycles |
| All              | 32,000 total flight cycles | STRG17 LH/RH (FR76 through FR80)<br>STGR29 LH/RH (FR72 through FR76)<br>STGR35 LH/RH (FR72 through FR80)                            | 5,700 flight cycles |
| All              | 27,000 total flight cycles | STGR51 LH/RH (FR72 through FR80)  | 5,700 flight cycles |

- (1) Within the applicable time in paragraph (j)(1)(i) or (j)(1)(ii) of this AD after doing the last inspection of the "standard" areas of the longitudinal lap joints in accordance with Airbus Mandatory Service Bulletin A300-53-0211, Revision 07, dated December 1, 2006.
  - (i) For longitudinal lap joints with bonded doublers: 6,000 flight cycles.
  - (ii) For longitudinal lap joints without bonded doublers: 8,000 flight cycles.
- (2) Within the applicable time specified in Tables 3 or 4 of this AD, or within 60 days after the effective date of this AD, whichever occurs later.

#### Post-Repair or Modification Inspections and Repair or Modification if Necessary

(k) For airplanes on which a repair or modification has been done in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-53-0211: At the applicable initial inspection time specified in Table 5 of this AD, do an eddy current inspection for cracking of the repaired or modified areas, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-53-0211, Revision 07, dated December 1, 2006. If no cracking is found, repeat the inspection thereafter at the applicable intervals specified in Table 5 of this AD. If any crack is found during any inspection required by this paragraph, repair or modify before further flight, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-53-0211, Revision 07, dated December 1, 2006.

**Table 5–Post-Repair or Modification Compliance Time** 

| Repair or Retrofit<br>Solution/Area – as Identified<br>in Airbus Mandatory Service<br>Bulletin A300-53-0211 –   | Initial Inspection After Repair or<br>Retrofit –           | Follow-up<br>Inspections at<br>Intervals Not to<br>Exceed – |
|---|--|---|
| Repair 1: (Without cut out)   | Skin/doubler thickness                                     |   |
| also applicable to the solution with removed inner doubler  | • < 1 inch: 10,000 flight cycles after repair              | 1,000 flight cycles   |
|   | • ≥ 1 inch and < 2 inch: 30,000 flight cycles after repair | 2,000 flight cycles   |
|   | • $\geq$ 2 inch: 60,000 flight cycles after repair         | 6,400 flight cycles   |
| Repair 4 (With cut out)   | Within 32,000 flight cycles after repair                   | 5,000 flight cycles   |
| Repair 4A (With cut out)  | Within 24,000 flight cycles after repair                   | 5,300 flight cycles   |
| Repair 7 (MSN 0095 at STGR52 LH in Section 16)  | Within 37,000 flight cycles after repair                   | 12,000 flight cycles  |
| Repair 9 (MSN 0073 and 0095<br>STGR44 LH/RH in Sections<br>16 and 17)   | Within 36,000 flight cycles after repair                   | 5,000 flight cycles   |
| Repair 10 (Post-repair inspections in Figure 13)  | Within 20,000 flight cycles after repair                   | 11, 000 flight cycles                                       |
| Repair 2 (With cut out)   | Within 24,000 flight cycles after repair                   | 5,300 flight cycles   |
| Repair 3 (Without cut out)  | Within 24,000 flight cycles after repair                   | 5,300 flight cycles   |
| Retrofit 1 (Retrofit lap joint)   | Within 32,000 flight cycles after retrofit                 | 5,000 flight cycles   |
| Retrofit 2 Retrofit lower shell<br>(4 panel solution) STGR43 LH<br>(FR26 through FR39),<br>STGR43 RH (FR26 through<br>FR38), and STGR49 RH<br>(FR26 through FR38)     | Within 32,000 flight cycles after retrofit                 | 3,000 flight cycles   |
| Retrofit 2 Retrofit lower shell<br>(4 panel solution) STGR46 RH<br>(FR19 through FR26), and<br>STGR47 LH (FR26 through<br>FR39), and STGR51 LH<br>(FR19 through FR26) | Within 32,000 flight cycles after retrofit                 | 5,700 flight cycles   |
| Retrofit 3 Retrofit lower shell<br>(3 panel solution) STGR43 LH<br>(FR26 through FR39), and<br>STGR43 RH (FR26 through<br>FR38)                                       | Within 32,000 flight cycles after retrofit                 | 3,000 flight cycles   |

| Retrofit 3 Retrofit lower shell (3 panel solution) STGR46 RH (FR19 through FR26), and STGR51 LH (FR19 through FR26), and STGR54 LH (FR26 through FR39) | Within 32,000 flight cycles after retrofit | 5,700 flight cycles  |
|--|--|----------------------|
| Retrofit 3A (STGR43 LH/RH between FR37 and FR39 in Section 14)   | Within 32,000 flight cycles after retrofit | 5,000 flight cycles  |
| Retrofit 4 (Retrofit lap joint without cut out)  | Within 42,000 flight cycles after retrofit | 5,000 flight cycles  |
| Retrofit 5 (Retrofit lap joint)  | Within 42,000 flight cycles after retrofit | 5,000 flight cycles  |
| Retrofit 6 (Retrofit lap joint)  | Within 34,000 flight cycles after retrofit | 12,000 flight cycles |
| Retrofit 7 (Retrofit lap joint)  | Within 47,600 flight cycles after retrofit | 5,400 flight cycles  |

# Fuselage Inner Doubler Inspections and Repair if Necessary

(l) For airplanes on which any inspections of the fuselage bonded inner doublers of the longitudinal lap joints in Sections 13 through 18 (except Sections 16 and 17 at Stringer 31 left-hand and right-hand) for disbonding and cracking have not been done as of the effective date of this AD in accordance with Airbus Service Bulletin A300-53-229: Prior to the accumulation of 24,000 total flight cycles or within 15 years since new, whichever occurs first; or within 60 days after the effective date of this AD; whichever occurs later, do a detailed inspection of the fuselage bonded inner doublers of the longitudinal lap joints in Sections 13 through 18 (except Sections 16 and 17 at Stringer 31 left-hand and right-hand) for disbonding and cracking, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997. If no disbonding and no cracking is found, repeat the inspection thereafter at the applicable intervals specified in Table 6 of this AD.

Table 6-Repetitive Intervals for Inspections for Disbonding and Cracking

| For Area –  | Inspect at Intervals Not to Exceed –  |
|---|---|
| Sections 13 and 14 as specified in Airbus<br>Service Bulletin A300-53-229, Revision 5, dated<br>April 8, 1997     | Within 7 years or 12,000 flight cycles after doing the inspection, whichever occurs first   |
| Sections 15 through 18 as specified in Airbus<br>Service Bulletin A300-53-229, Revision 5, dated<br>April 8, 1997 | Within 8.5 years or 12,000 flight cycles after doing the inspection, whichever occurs first |

- (1) If no cracking is found and "minor" disbonding, as defined in Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997, is found: Repeat the inspection thereafter at intervals not to exceed 1 year for areas below stringer 22, and at intervals not to exceed 2 years for areas above and including stringer 22.
- (2) If no cracking is found and "major" disbonding, as defined in Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997, is found: Within 1,000 flight cycles after doing the inspection, repair, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997.

- (3) If any cracking is found, repair prior to further flight, in accordance with Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997.
- (m) For airplanes on which any inspections of the fuselage bonded inner doublers of the longitudinal lap joints in Sections 13 through 18 (except Sections 16 and 17 at Stringer 31 left-hand and right-hand) for disbonding and cracking have been done as of the effective date of this AD in accordance with Airbus Service Bulletin A300-53-229; except for airplanes on which a repair of that area has been done in accordance with Airbus Service Bulletin A300-53-229: At the applicable time specified in Table 6 of this AD, or within 60 days after the effective date of this AD, whichever occurs later, do a detailed inspection of the fuselage bonded inner doublers of the longitudinal lap joints in Sections 13 through 18 (except Sections 16 and 17 at Stringer 31 left-hand and right-hand) for disbonding and cracking, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997. If no disbonding and no cracking is found, repeat the inspection at the applicable intervals specified in Table 6 of this AD.
- (1) If no cracking is found and "minor" disbonding, as defined in Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997, is found: Repeat the inspection thereafter at intervals not to exceed 1 year for areas below stringer 22, and at intervals not to exceed 2 years for areas above and including stringer 22.
- (2) If no cracking is found and "major" disbonding, as defined in Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997, is found: Within 1,000 flight cycles after doing the inspection, repair, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997.
- (3) If any cracking is found, repair prior to further flight, in accordance with Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997.
- (n) For airplanes on which any inspections of the fuselage bonded inner doublers of the longitudinal lap joints in Sections 16 and 17 at Stringer 31 left-hand and right-hand for disbonding and cracking have not been done as of the effective date of this AD in accordance with Airbus Service Bulletin A300-53-229: Prior to the accumulation of 24,000 total flight cycles or within 12 years since new, whichever occurs first; or within 60 days after the effective date of this AD; whichever occurs later, do a detailed inspection of the fuselage bonded inner doubles of the longitudinal lap joints in Sections 16 and 17 at Stringer 31 left-hand and right-hand for disbonding and cracking, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997. If no disbonding and no cracking is found, repeat the inspection thereafter at intervals not to exceed 7 years or 12,000 flight cycles, whichever occurs first.
- (1) If no cracking is found and "minor" disbonding, as defined in Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997, is found: Repeat the inspection thereafter at intervals not to exceed 1 year for areas below stringer 22, and at intervals not to exceed 2 years for areas above and including stringer 22. Doing a repair in accordance with Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997, terminates the repetitive inspections required by this paragraph for that area.
- (2) If no cracking is found and "major" disbonding, as defined in Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997, is found: Within 1,000 flight cycles after doing the inspection, repair, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997.
- (3) If any cracking is found, repair prior to further flight, in accordance with Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997.
- (o) For airplanes on which any inspections of the fuselage bonded inner doublers of the longitudinal lap joints in Sections 16 and 17 at Stringer 31 left-hand and right-hand for disbonding and cracking have been done as of the effective date of this AD in accordance with Airbus Service Bulletin A300-53-229; except airplanes on which a repair of that area has been done in accordance with Airbus Service Bulletin A300-53-229: Within 7 years or 12,000 flight cycles after doing the inspection, whichever occurs first; or within 60 days after the effective date of this AD; whichever occurs later, do a detailed inspection of the fuselage bonded inner doubles of the longitudinal lap

joints in Sections 16 and 17 at Stringer 31 left-hand and right-hand for disbonding and cracking in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997. If no disbonding and corrosion are found, repeat the inspection thereafter at intervals not to exceed 7 years or 12,000 flight cycles, whichever occurs first.

- (1) If no cracking is found and "minor" disbonding, as defined in Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997, is found: Repeat the inspection thereafter at intervals not to exceed 1 year for areas below stringer 22, and at intervals not to exceed 2 years for areas above and including stringer 22. Doing a repair in accordance with Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997, terminates the repetitive inspections required by this paragraph for that area.
- (2) If no cracking is found and "major" disbonding, as defined in Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997, is found: Within 1,000 flight cycles after doing the inspection, repair, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997.
- (3) If any cracking is found, repair prior to further flight, in accordance with Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997.
- (p) Although Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997; and Airbus Mandatory Service Bulletin A300-53-0211, Revision 07, dated December 1, 2006; specify to submit certain information to the manufacturer, this AD does not include that requirement.

# **FAA AD Differences**

Note 1: This AD differs from the MCAI and/or service information as follows:

- (1) Although the MCAI or service information allows further flight after cracks are found during compliance with the required action, this AD requires that you repair the crack(s) before further flight.
- (2) The MCAI or service information does not include enforceable compliance times for certain actions; however, this AD requires that those actions be done at the enforceable times specified in this AD.
- (3) Although the MCAI or service information tells you to submit information to the manufacturer, paragraph (p) of this AD specifies that such submittal is not required.

#### **Other FAA AD Provisions**

- (q) The following provisions also apply to this AD:
- (1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2125; fax (425) 227-1149. Information may be e-mailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.
- (2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

#### **Related Information**

(r) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2007-0091, dated April 10, 2007, corrected June 23, 2008; Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997; and Airbus Mandatory Service Bulletin A300-53-0211, Revision 07, dated December 1, 2006; for related information.

# **Material Incorporated by Reference**

- (s) You must use Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997, including Appendix A300SB/53-229, dated April 10, 1989; and Airbus Mandatory Service Bulletin A300-53-0211, Revision 07, dated December 1, 2006; as applicable; to do the actions required by this AD, unless the AD specifies otherwise. Only pages 1, 2, 5, 11, and 12, of Airbus Service Bulletin A300-53-229, Revision 5, dated April 8, 1997, show revision level 5 and issue date April 8, 1997; pages 3, 4-10, and 13-17 show revision level 4 and issue date March 30, 1994, and pages 1-17 of Appendix A300SB/53-229 show issue date April 10, 1989.
- (1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) For service information identified in this AD, contact Airbus SAS–EAW (Airworthiness Office), 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; e-mail account.airworth-eas@airbus.com; Internet http://www.airbus.com.
- (3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.
- (4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

Issued in Renton, Washington, on September 23, 2011. Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service.

# AIRWORTHINESS DIRECTIVE



www.faa.gov/aircraft/safety/alerts/ www.gpoaccess.gov/fr/advanced.html

**2011-21-01 Fokker Services B.V.:** Amendment 39-16824. Docket No. FAA-2011-0568; Directorate Identifier 2011-NM-010-AD.

#### **Effective Date**

(a) This airworthiness directive (AD) becomes effective November 16, 2011.

#### Affected ADs

(b) None.

# **Applicability**

(c) This AD applies to Fokker Services B.V. Model F.27 Mark 050, 200, 300, 400, 500, 600, and 700 airplanes; and Fokker Services B.V. Model F.28 Mark 0070, 0100, 1000, 2000, 3000, and 4000 airplanes; certificated in any category; all serial numbers.

Note 1: This AD requires revisions to certain operator maintenance documents to include a new Critical Design Configuration Control Limitation (CDCCL). Compliance with this CDCCL is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by this AD, the operator may not be able to accomplish the actions described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance (AMOC) according to paragraph (j)(1) of this AD. The request should include a description of changes to the required inspections that will ensure the continued operational safety of the airplane.

# Subject

(d) Air Transport Association (ATA) of America Code 28: Fuel.

# Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

[T]he Federal Aviation Administration (FAA) has published Special Federal Aviation Regulation (SFAR) 88, and the Joint Aviation Authorities (JAA) have published Interim Policy INT/POL/25/12. The review conducted by Fokker Services on the Fokker F27 and F28 type designs in response to these regulations revealed that, under certain failure conditions, a short circuit can develop in the fuel pilot valve solenoid or in the wiring to the solenoid. Such a short circuit may result in an ignition source in the wing tank vapour space.

This condition, if not corrected, could result in a wing fuel tank explosion and consequent loss of the aeroplane.

\* \* \* \* \*

# **Compliance**

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

# **Installation of Fuses Packed in Jiffy Junctions**

(g) Within 24 months after the effective date of this AD, re-work the wiring and install the fuses packed in jiffy junctions (i.e., crimped wire in-line junction device), in accordance with the Accomplishment Instructions of the applicable Fokker service bulletin identified in table 1 of this AD.

**Table 1–Service Bulletins** 

| Fokker Service Bulletin –   | Dated –       |
|---|---------------|
| SBF50-28-024, including Drawing W7916-057, Sheets 006 and 007, Issue E, dated June 23, 2010, Drawing W7987-520, Sheets 1 and 2, dated October 24, 2005, and Manual Change Notification – Maintenance Document MCNM-F50-070, dated June 23, 2010 | June 23, 2010 |
| SBF28-28-051, including Drawing W57231, Sheets 010 and 011, Issue K, dated June 23, 2010, Drawing W58048, Sheet 2, dated April 29, 2010, and Manual Change Notification – Maintenance Document MCNM-F28-034, dated June 23, 2010                | June 23, 2010 |
| SBF27-28-069, including Drawing W7202-138, Sheets 001 and 002, Issue B, dated June 23, 2010, and Manual Change Notification – Maintenance Document MCNM-F27-025, dated June 23, 2010  | June 23, 2010 |
| SBF100-28-042, including Drawing W41192, Sheet 012, Issue AG, dated June 23, 2010, Drawing W59520, Sheet 1, Issue A, dated April 29, 2010, and Manual Change Notification – Maintenance Document MCNM-F100-129, dated June 23, 2010             | June 23, 2010 |

# **Critical Design Configuration Control Limitation (CDCCL)**

(h) Before further flight after doing the actions required by paragraph (g) of this AD: Revise the aircraft maintenance program by incorporating the CDCCL specified in paragraph 1.L.(1)(c) of the applicable Fokker service bulletins identified in table 1 of this AD.

#### No Alternative Actions, Intervals, and/or CDCCLs

(i) After accomplishing the revision required by paragraph (h) of this AD, no alternative CDCCLs may be used unless the CDCCLs are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (j)(1) of this AD.

#### **FAA AD Differences**

Note 2: This AD differs from the MCAI and/or service information as follows:

Although European Aviation Safety Agency (EASA) Airworthiness Directive 2010-0195, dated September 29, 2010, specifies revising the maintenance program to include maintaining CDCCLs, this AD only requires the revision. Requiring a revision of the maintenance program, rather than requiring maintaining CDCCLs, requires operators to record AD compliance only at the time the

revision is made. Maintaining CDCCLs specified in the airworthiness limitations must be complied with in accordance with 14 CFR 91.403(c).

#### Other FAA AD Provisions

- (j) The following provisions also apply to this AD:
- (1) Alternative Methods of Compliance: The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Tom Rodriguez, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone 425-227-1137; fax 425-227-1149. Information may be e-mailed to: 9-ANM-11-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.
- (2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

#### **Related Information**

(k) Refer to MCAI EASA Airworthiness Directive 2010-0195, dated September 29, 2010, and the Fokker service bulletins identified in table 1 of this AD, for related information.

# **Material Incorporated by Reference**

- (l) You must use the following service information, as applicable, to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51 of the following service information on the date specified.
- (1) Fokker Service Bulletin SBF50-28-024, including Manual Change Notification–Maintenance Document MCNM-F50-070, dated June 23, 2010, and including Drawing W7916-057, Sheets 006 and 007, Issue E, dated June 23, 2010, and Drawing W7987-520, Sheets 1 and 2, dated October 24, 2005, approved for IBR November 16, 2011.
- (2) Fokker Service Bulletin SBF28-28-051, including Manual Change Notification–Maintenance Document MCNM-F28-034, dated June 23, 2010, and including Drawing W57231, Sheets 010 and 011, Issue K, dated June 23, 2010, and Drawing W58048, Sheet 2, dated April 29, 2010, approved for IBR November 16, 2011.
- (3) Fokker Service Bulletin SBF27-28-069, including Manual Change Notification—Maintenance Document MCNM-F27-025, dated June 23, 2010, and including Drawing W7202-138, Sheets 001 and 002, Issue B, dated June 23, 2010, approved for IBR November 16, 2011.
- (4) Fokker Service Bulletin SBF100-28-042, including Manual Change Notification—Maintenance Document MCNM-F100-129, dated June 23, 2010, and including Drawing W41192, Sheet 012, Issue AG, dated June 23, 2010, and Drawing W59520, Sheet 1, Issue A, dated April 29, 2010, approved for IBR November 16, 2011.
- (5) For service information identified in this AD, contact Fokker Services B.V., Technical Services Dept., P.O. Box 231, 2150 AE Nieuw-Vennep, the Netherlands; telephone +31 (0)252-627-350; fax +31 (0)252-627-211; e-mail technicalservices.fokkerservices@stork.com; Internet: http://www.myfokkerfleet.com.

- (6) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.
- (7) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

Issued in Renton, Washington, on September 23, 2011. Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service.

# AIRWORTHINESS DIRECTIVE



www.faa.gov/aircraft/safety/alerts/ www.gpoaccess.gov/fr/advanced.html

**2011-21-02 Airbus:** Amendment 39-16825. Docket No. FAA-2011-0999; Directorate Identifier 2010-NM-235-AD.

#### **Effective Date**

(a) This airworthiness directive (AD) becomes effective October 27, 2011.

#### **Affected ADs**

(b) None.

# **Applicability**

(c) This AD applies to Airbus Model A330-243F airplanes; certificated in any category; equipped with Rolls Royce Trent 700 series engines.

# **Subject**

(d) Air Transport Association (ATA) of America Code 78: Engine Exhaust.

#### Reason

(e) The mandatory continued airworthiness information (MCAI) states:

During flight tests, unexpected fatigue high loads were measured on the hinges integrated on the 12 o'clock beam which form the upper extreme edge of the thrust reverser unit C duct.

This situation, if not corrected, could lead to the separation of the thrust reverser from the aeroplane and therefore to damage of the aeroplane and hazards to persons or property on the ground.

\* \* \* \* \*

# **Compliance**

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

# Actions

(g) At the applicable initial and repetitive times specified in paragraph (g)(1) or (g)(2) of this AD, perform a general visual inspection of the hinge assemblies and along the beam structure of the right and left engine thrust reversers for cracks, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-78-3006, Revision 09, excluding Appendix 1, dated October 21, 2009.

- (1) For airplanes on which neither Airbus modification 46879 nor Airbus modification 47358 have been embodied in production: Do the inspection before the accumulation of 1,200 total flight cycles after the first flight of the airplane or within 3 months after the effective date of the AD, whichever occurs later. Thereafter, do the inspection at intervals not to exceed 1,200 flight cycles.
- (2) For airplanes on which either Airbus modification 46879 or Airbus modification 47358 have been embodied in production: Do the inspection before the accumulation 2,000 total flight cycles after the first flight of the airplane, or within 3 months after the effective date of this AD, whichever occurs later. Thereafter, do the inspection at intervals not to exceed 2,000 flight cycles.
- (h) If no crack is found during the general visual inspection required by paragraph (g) of this AD, before further flight, perform a detailed inspection of hinges 2, 3, 4, and 5 of the right and left thrust reversers for cracks, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-78-3006, Revision 09, excluding Appendix 1, dated October 21, 2009. If no crack is found during the detailed inspection, repeat the general visual inspection required by paragraph (g) of this AD at the intervals specified in paragraphs (g)(1) or (g)(2) of this AD, as applicable.
- (i) If any cracking is found during any inspection required by paragraph (g) or (h) of this AD: Before further flight, replace the affected thrust reverser, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-78-3006, Revision 09, excluding Appendix 1, dated October 21, 2009. Repeat the general visual inspection required by paragraph (g) of this AD at the intervals specified in paragraphs (g)(1) or (g)(2) of this AD, as applicable.

#### **FAA AD Differences**

Note 1: This AD differs from the MCAI and/or service information as follows:

Although European Aviation Safety Agency Airworthiness Directive (EASA) 2010-0187, dated September 21, 2010, is applicable to Airbus Model A330-243, -243F, -341, -342, and -343 airplanes, this AD applies to only A330-243F airplanes. The unsafe condition for Model A330-243, -341, -342, and -343 airplanes is addressed in FAA AD 2001-09-14, amendment 39-12221 (66 FR 23838, May 10, 2001).

# **Other FAA AD Provisions**

- (j) The following provisions also apply to this AD:
- (1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of ANM-116, send it to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1138; fax (425) 227-1149. Information may be e-mailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.
- (2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

#### **Related Information**

(k) Refer to MCAI EASA Airworthiness Directive 2010-0187, dated September 21, 2010; and Airbus Mandatory Service Bulletin A330-78-3006, Revision 09, excluding Appendix 1, dated October 21, 2009; for related information.

# **Material Incorporated by Reference**

- (1) You must use Airbus Mandatory Service Bulletin A330-78-3006, Revision 09, excluding Appendix 1, dated October 21, 2009, to do the actions required by this AD, unless the AD specifies otherwise.
- (1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) For service information identified in this AD, contact Airbus SAS—Airworthiness Office—EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; e-mail airworthiness.A330-A340@airbus.com; Internet http://www.airbus.com.
- (3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.
- (4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

Issued in Renton, Washington, on September 23, 2011. Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service.

# AIRWORTHINESS DIRECTIVE



www.faa.gov/aircraft/safety/alerts/ www.gpoaccess.gov/fr/advanced.html

**2011-21-03 The Boeing Company:** Amendment 39-16826; Docket No. FAA-2010-1312; Directorate Identifier 2010-NM-220-AD.

#### **Effective Date**

(a) This AD is effective November 16, 2011.

#### **Affected ADs**

(b) None.

# **Applicability**

(c) This AD applies to The Boeing Company Model 777-200, -200LR, -300, and -300ER series airplanes; certificated in any category; as identified in Boeing Service Bulletin 777-24-0102, Revision 1, dated June 17, 2010; and Boeing Special Attention Service Bulletin 777-29-0032, dated August 9, 2007.

# **Subject**

(d) Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Codes 29: Hydraulic power; and 24: Electrical power.

#### **Unsafe Condition**

(e) This AD was prompted by a report of a fire in the main equipment center due to failure of an external power connector, which caused high-temperature arcing and subsequent splatter of molten copper on an adjacent hydraulic tube, creating a hole in the tube and spraying hydraulic fluid into the power connector, resulting in a fire. In addition there were several reports of overheating or arcing of external power connectors, and one report of a fire due to arcing caused by foreign object debris (FOD). We are issuing this AD to prevent FOD from entering the primary and secondary external power connectors, which could result in overheating or arcing and consequent fire in the main equipment center.

# **Compliance**

(f) Comply with this AD within the compliance times specified, unless already done.

#### **Modification**

- (g) Within 36 months after the effective date of this AD, do the actions required by paragraphs (g)(1) and (g)(2) of this AD.
- (1) For airplanes identified in Boeing Service Bulletin 777-24-0102, Revision 1, dated June 17, 2010: Install FOD rubber shields over the primary and secondary external power connectors, in

accordance with the Accomplishment Instructions of Boeing Service Bulletin 777-24-0102, Revision 1, dated June 17, 2010.

(2) For airplanes identified in Boeing Special Attention Service Bulletin 777-29-0032, dated August 9, 2007: Wrap silicone tape around the hydraulic tube, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-29-0032, dated August 9, 2007.

# **Exception to Service Information**

(h) Figure 1 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-29-0032, dated August 9, 2007, does not identify the units of the dimensions of the silicone tape installed on the hydraulic tube; those dimensions are identified in inches.

# **Credit for Actions Accomplished in Accordance With Previous Service Information**

(i) Actions done before the effective date of this AD in accordance with Boeing Service Bulletin 777-24-0102, dated July 12, 2007, are acceptable for compliance with the corresponding requirements of paragraph (g)(1) of this AD.

# **Alternative Methods of Compliance (AMOCs)**

- (j)(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD. Information may be e-mailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.
- (2) Before using any approved AMOC, notify your Principal Maintenance Inspector or Principal Avionics Inspector, as appropriate, or lacking a principal inspector, your local Flight Standards District Office.

#### **Related Information**

- (k) For more information about this AD, contact Georgios Roussos, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; phone: (425) 917-6482; fax: (425) 917-6590; e-mail: georgios.roussos@faa.gov.
- (l) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; e-mail me.boecom@boeing.com; Internet https://www.myboeingfleet.com. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

# **Material Incorporated by Reference**

- (m) You must use Boeing Service Bulletin 777-24-0102, Revision 1, dated June 17, 2010; or Boeing Special Attention Service Bulletin 777-29-0032, dated August 9, 2007; as applicable; to do the actions required by this AD, unless the AD specifies otherwise.
- (1) The Director of the Federal Register approved the incorporation by reference of the service information contained under 5 U.S.C. 552(a) and 1 CFR part 51.

- (2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; e-mail me.boecom@boeing.com; Internet https://www.myboeingfleet.com.
- (3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.
- (4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call 202-741-6030, or go to http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

Issued in Renton, Washington, on September 27, 2011. Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service.



www.faa.gov/aircraft/safety/alerts/ www.gpoaccess.gov/fr/advanced.html

**2011-21-04 Bombardier Inc.:** Amendment 39-16827. Docket No. FAA-2011-0479; Directorate Identifier 2010-NM-154-AD.

### **Effective Date**

(a) This airworthiness directive (AD) becomes effective November 16, 2011.

#### **Affected ADs**

(b) This AD supersedes AD 2006-12-16, Amendment 39-14642 (71 FR 34006, June 13, 2006).

# **Applicability**

(c) This AD applies to Bombardier Model DHC-8-102, -103, -106, -201, -202, -301, -311, and -315 airplanes, certificated in any category; serial numbers (S/Ns) 003 through 557 inclusive; equipped with cockpit door installation part numbers (P/Ns) identified in table 1 of this AD.

Table 1-Cockpit Door Installations Affected by This AD

| P/N       | Dash Number(s)           |
|-----------|--------------------------|
| 82510074  | All                      |
| 82510294  | All                      |
| 82510310  | -001                     |
| 8Z4597    | -001                     |
| H85250010 | All                      |
| 82510700  | All                      |
| 82510704  | All except -502 and -503 |

### Subject

(d) Air Transport Association (ATA) of America Code 52: Doors.

### Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

During structural testing of the cockpit door, it was observed that the door lower hinge block rotated which resulted in disengagement of the mating hinge pin and excessive door deflection. The lower hinge block rotated because it was attached to its support structure with only one attachment bolt, which prevented it from reacting to any moment force. This condition, if not corrected, could result in breakage and uncontrolled release of the cockpit door under certain decompression situations.

After incorporation of Modsum 8Q900267 \* \* \* an operator reported a failure to complete the cockpit door removal function test. This condition, if not corrected, could result in the inability to remove the cockpit door for emergency egress. \* \* \*

# **Compliance**

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Restatement of Requirements of AD 2006-12-16 Amendment 39-14642 (71 FR 34006, June 13, 2006), With New Service Information

### Modification

(g) Within 24 months after July 18, 2006 (the effective date of AD 2006-12-16 Amendment 39-14642 (71 FR 34006, June 13, 2006)), modify the cockpit door from a single-point attachment to a two-point attachment in accordance with the Accomplishment Instructions of the applicable service bulletin in table 2 of this AD. For airplane serial numbers 452, 464, 490, 506, and 508 through 557 inclusive: After the effective date of this AD, use Bombardier Service Bulletin 8-52-58, Revision A, dated November 17, 2006.

Table 2-Bombardier Service Bulletins for Modification Required by Paragraph (g) of This AD

| Use this Bombardier Service<br>Bulletin –                              | For airplane serial numbers –   |
|--|---|
| 8-52-54, Revision A, dated<br>November 5, 2004                         | 003 through 451 inclusive, 453 through 463 inclusive, 465 through 489 inclusive, 491 through 505 inclusive, and 507 |
| 8-52-58, dated May 12, 2004, or<br>Revision A, dated November 17, 2006 | 452, 464, 490, 506, and 508 through 557 inclusive   |

Note 1: Bombardier Service Bulletin 8-52-54, Revision A, dated November 5, 2004, refers to Bombardier Series 100/300 Modification Summary (Modsum) 8Q100859 as an additional source of guidance for installing a hinge pin with a two-point attachment. Bombardier Service Bulletin 8-52-58, dated May 12, 2004, or Revision A, dated November 17, 2006, refers to Bombardier Series 100/300 Modsum 8Q900267 as an additional source of guidance for reworking and installing the cockpit door, and reworking the lower hinge attachment to provide a downward-facing pin with a two-point attachment.

# **Prior/Concurrent Requirements**

(h) Prior to or concurrently with the modification in paragraph (g) of this AD, do the applicable actions specified in table 3 of this AD, in accordance with a method approved by either the Manager, New York Aircraft Certification (ACO), FAA; or Transport Canada Civil Aviation (TCCA) (or its delegated agent).

Table 3-Bombardier Service Bulletins for Requirements of Paragraph (h) of This AD

| For airplanes affected by<br>Bombardier Service<br>Bulletin–              | That have these serial numbers—   | Do these actions-  |
|---|---|--|
| 8-52-54, Revision A, dated<br>November 5, 2004                            | 003 through 407 inclusive,<br>409 through 412 inclusive,<br>and 414 through 433<br>inclusive. | Rework the cockpit door emergency release.  Install a new label regarding alternate release of the door. |
| 8-52-58, dated May 12,<br>2004, or Revision A, dated<br>November 17, 2006 | 452, 464, 490, 506, and 508 through 557 inclusive   | Install the cockpit door.  |

Note 2: Bombardier Service Bulletin 8-52-54, Revision A, dated November 5, 2004, refers to De Havilland Aircraft of Canada, Limited, Modification 8/2337 as an additional source of guidance for reworking the cockpit door emergency release; and Modification 8/3339 as additional source of guidance for installing a new label regarding alternate release of the door; on airplanes having serial numbers 003 through 407 inclusive, 409 through 412 inclusive, and 414 through 433 inclusive.

Note 3: Bombardier Service Bulletins 8-52-58, dated May 12, 2004; and Revision A, dated November 17, 2006; refer to Bombardier Modsum 8Q200015, as an additional source of guidance for installing the cockpit door, on airplanes having serial numbers 452, 464, 490, 506, and 508 through 557 inclusive.

#### **Actions Done in Accordance With Previous Revision of Service Bulletin**

(i) Actions done before July 18, 2006, in accordance with Bombardier Service Bulletin 8-52-54, dated May 12, 2004, are acceptable for compliance with the corresponding requirements in paragraph (g) of this AD.

### **New Requirements of This AD**

- (j) For airplanes having S/N 452, 464, 490, 506, and 508 through 557 inclusive, and on which the requirements in paragraph (g) of this AD have been done as of the effective date of this AD: Within 12 months after the effective date of this AD rework the cockpit door striker plate and replace the latch block, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 8-52-61, dated October 20, 2006.
- (k) For airplanes having S/Ns 452, 464, 490, 506, and 508 through 557 inclusive, and on which the requirements in paragraph (g) of this AD have not been done as of the effective date of this AD: Prior to or concurrently with doing the modification required in paragraph (g) of this AD, rework the cockpit door striker plate and replace the latch block, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 8-52-61, dated October 20, 2006.

#### **FAA AD Differences**

Note 4: This AD differs from the MCAI and/or service information as follows: No differences.

#### **Other FAA AD Provisions**

(1) The following provisions also apply to this AD:

- (1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office, ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.
- (2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

#### **Related Information**

(m) Refer to MCAI Canadian Airworthiness Directive CF-2005-34R1, dated August 15, 2007; Bombardier Service Bulletin 8-52-54, Revision A, dated November 5, 2004; Bombardier Service Bulletin 8-52-58, Revision A, dated November 17, 2006; and Bombardier Service Bulletin 8-52-61, dated October 20, 2006; for related information.

# **Material Incorporated by Reference**

- (n) You must use the following service information to do the applicable actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR Part 51 of the following service information on the date specified:
- (1) Bombardier Service Bulletin 8-52-58, Revision A, dated November 17, 2006, approved for IBR November 16, 2011;
- (2) Bombardier Service Bulletin 8-52-61, dated October 20, 2006, approved for IBR November 16, 2011;
- (3) Bombardier Service Bulletin 8-52-54, Revision A, dated November 5, 2004, approved for IBR July 18, 2006 (71 FR 34006, June 13, 2006).
- (4) For service information identified in this AD, contact Bombardier Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; e-mail thd.qseries@aero.bombardier.com; Internet http://www.bombardier.com.
- (5) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.
- (6) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

Issued in Renton, Washington, on September 23, 2011. Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service.



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**2011-21-05 Aviointeriors S.p.A.:** Amendment 39-16828. Docket No. FAA-2011-1000; Directorate Identifier 2011-NM-048-AD.

## **Effective Date**

(a) This airworthiness directive (AD) becomes effective October 27, 2011.

#### **Affected ADs**

(b) None.

# **Applicability**

(c) This AD applies to Aviointeriors S.p.A. passenger seats 12M()()-()()()()()()()(), all part numbers (P/Ns) equipped with backrest P/N 313033000000 or 313033100000; as identified in Section 1.A. of Aviointeriors Vendor Service Bulletin 12M/F68-06, Revision 1, dated October 29, 2009; and that are installed on, but not limited to ATR Model ATR42-200, -300, -320, and -500 airplanes and Model ATR72-101, -201, -102, -202, -211, -212, and -212A airplanes, certificated in any category.

Note 1: This AD applies to certain Aviointeriors passenger seats as installed on any airplane, regardless of whether the airplane has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance according to paragraph (k) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

# **Subject**

(d) Air Transport Association (ATA) of America Code 25: Equipment/Furnishings.

### Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

Failures of the recline actuator metal fitting have been reported on seat backrests of inservice aircraft. \* \* \*

\* \* \* \* \*

Actions required by this AD are intended to prevent further failures of the seat backrests which could result in injury to passengers or crew members during an emergency landing.

# **Compliance**

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

# Replacement

- (g) At the later of the compliance times specified in paragraphs (g)(1) and (g)(2) of this AD, replace backrests having P/N 313033000000 and 313033100000, in accordance with the instructions given in Aviointeriors Vendor Service Bulletin 12M/F68-06, Revision 1, dated October 29, 2009, except as provided by paragraph (i) of this AD.
  - (1) Before the accumulation of 13,000 total flight cycles on the seat since new.
- (2) Within 500 flight cycles or 6 months after the effective date of this AD, whichever occurs first.

#### **Parts Installation**

(h) As of the effective date of this AD, no person shall install Aviointeriors passenger seats P/N 12M()()-()()()()()()() equipped with backrests having P/N 313033000000 or 313033100000 (being either unmarked or marked with "0" as indicated in Section 3 of Aviointeriors Vendor Service Bulletin 12M/F68-06, Revision 1, dated October 29, 2009) on any airplane.

# **Extended Replacement Compliance Time for Certain Airplanes**

- (i) For airplanes on which the replacement required by paragraph (g) of this AD cannot be done within the required compliance time specified in paragraph (g) of this AD: The airplane may be dispatched with the affected seat installed provided the actions in paragraph (i)(1) and (i)(2) of this AD are done.
- (1) The provisions specified in paragraphs (i)(1)(i), (i)(1)(ii), and (i)(1)(iii) of this AD are complied with.
- (i) Seat is placarded as "Do not occupy" and measures are taken to be sure that the affected seat remains unoccupied during the flight duration.
  - (ii) Affected seat does not block any emergency exit.
  - (iii) Affected seat does not restrict any passenger to get access to the main aisle.
- (2) Within 12 months after the effective date of this AD, the backrest is replaced in accordance with the instructions given in Aviointeriors Vendor Service Bulletin 12M/F68-06, Revision 1, dated October 29, 2009.

# Credit for Actions Accomplished in Accordance With Previous Service Information

(j) Actions accomplished before the effective date of this AD in accordance with Aviointeriors Vendor Service Bulletin 12M/F68-01, Revision 1, dated October 2, 2006; or Aviointeriors Vendor Service Bulletin 12M/F68-06, dated June 17, 2008; are considered acceptable for compliance with the corresponding actions specified in this AD.

### **FAA AD Differences**

Note 2: This AD differs from the MCAI and/or service information as follows: No differences.

### **Other FAA AD Provisions**

(k) The following provisions also apply to this AD:

- (1) Alternative Methods of Compliance (AMOCs): The Manager, Boston Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Jeffrey Lee, Aerospace Engineer, Boston Aircraft Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, Massachusetts 01803; telephone (781) 238-7161; fax (781) 238-7170. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.
- (2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

#### **Related Information**

(l) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2008-0135, dated July 16, 2008; and Aviointeriors Vendor Service Bulletin 12M/F68-06, Revision 1, dated October 29, 2009; for related information.

# **Material Incorporated by Reference**

- (m) You must use Aviointeriors Vendor Service Bulletin 12M/F68-06, Revision 1, dated October 29, 2009, to do the actions required by this AD, unless the AD specifies otherwise. Pages 1, 2, and 10 of this document are identified as Revision 1; the remaining pages are identified as Revision "new."
- (1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) For service information identified in this AD, contact Aviointeriors S.p.A., Engineering Product Support Division, Via Appia KM 66,400–04013 Tor Tre Ponti, Italy; telephone 0039-0773-689330 or 0039-0773-689291; fax 0039-0773-631546; e-mail avio@aviointeriors.it; Internet http://www.aviointeriors.it.
- (3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.
- (4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

Issued in Renton, Washington, on September 23, 2011. Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service.



www.faa.gov/aircraft/safety/alerts/ www.gpoaccess.gov/fr/advanced.html

**2011-21-06 BAE SYSTEMS (Operations) Limited:** Amendment 39-16829. Docket No. FAA-2011-0306; Directorate Identifier 2010-NM-176-AD.

### **Effective Date**

(a) This airworthiness directive (AD) becomes effective November 23, 2011.

### **Affected ADs**

(b) This AD supersedes AD 2009-10-02, Amendment 39-15897 (74 FR 21246, May 7, 2009).

# **Applicability**

(c) This AD applies to all BAE SYSTEMS (Operations) Limited Model 4101 airplanes, certificated in any category.

**Note 1:** This AD requires revisions to certain operator maintenance documents to include new actions (e.g., inspections) and/or Critical Design Configuration Control Limitations (CDCCLs). Compliance with these actions and/or CDCCLs is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by this AD, the operator may not be able to accomplish the actions described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval of an alternative method of compliance (AMOC) according to paragraph (l) of this AD. The request should include a description of changes to the required actions that will ensure the continued operational safety of the airplane.

### Subject

(d) Air Transport Association (ATA) of America Code 05.

#### Reason

- (e) The mandatory continuing airworthiness information (MCAI) states:
- \* \* \* BAE Systems (Operations) Ltd has issued Revision 33 of the AMM [airplane maintenance manual] to amend Chapter 05-10-10 by adding one new Structurally Significant Item (SSI) and increasing the repeat inspection period on another SSI. Failure to comply with this revision constitutes an unsafe condition.

\* \* \* \* \*

The unsafe condition is failure of certain structurally significant items, including the main landing gear and the nose landing gear, which could result in reduced structural integrity of the airplane; and fuel vapor ignition sources, which could result in a fuel tank explosion and consequent loss of the airplane.

# **Compliance**

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Restatement of Requirements of AD 2009-10-02, Amendment 39-15897 (74 FR 21246, May 7, 2009)

### Revise Airworthiness Limitations Section (AWL) of Instructions for Continued Airworthiness

- (g) Within 90 days after June 11, 2009 (the effective date of AD 2009-10-02, Amendment 39-15897 (74 FR 21246, May 7, 2009)): Revise the AWL section of the Instructions for Continued Airworthiness by incorporating the instructions of Subjects 05-10-10, "Airworthiness Limitations," 05-10-20, "Certification Maintenance Requirements," and 05-10-30, "Critical Design Configuration Control Limitations (CDCCL)—Fuel System," of Chapter 05, "Airworthiness Limitations," of the BAE Systems (Operations) Limited Jetstream Series 4100 Airplane Maintenance Manual (AMM), Revision 31, dated February 15, 2009. Thereafter, except as provided in paragraph (1) of this AD, no alternative replacement times or inspection intervals may be approved for any affected component. Doing the actions required by paragraph (i) of this AD terminates the requirements of this paragraph.
- (h) Where paragraph 2.A.(2) of Subject 05-10-10, "Airworthiness Limitations," of Chapter 05, "Airworthiness Limitations," of the BAE Systems (Operations) Limited Jetstream Series 4100 AMM, Revision 31, dated February 15, 2009, specifies that certain landing gear units "must be removed before 31st March 2008," this AD requires compliance within 60 days after June 11, 2009.

# New Requirements of This AD With Revised Service Information

# **Maintenance Program Revision**

- (i) Within 90 days after the effective date of this AD: Revise the maintenance program by incorporating Subjects 05-10-10, "Airworthiness Limitations"; 05-10-20, "Certification Maintenance Requirements"; and 05-10-30, "Critical Design Configuration Control Limitations (CDCCL)—Fuel System"; of Chapter 05, "Airworthiness Limitations," of the BAE Systems (Operations) Limited Jetstream Series 4100 AMM, Revision 35, dated February 15, 2011. Doing the actions required by this paragraph terminates the requirements of paragraph (g) of this AD. The initial compliance times for the tasks are at the applicable times specified in paragraphs (i)(1), (i)(2), and (i)(3) of this AD.
- (1) For replacement tasks of life limited parts specified in Subject 05-10-10, "Airworthiness Limitations," of Chapter 05, "Airworthiness Limitations," of the BAE Systems (Operations) Limited Jetstream Series 4100 AMM, Revision 35, dated February 15, 2011: Prior to the applicable flight cycles (landings) or flight hours (flying hours) on the part specified in the "Mandatory Life Limits" column in Subject 05-10-10, or within 90 days after the effective date of this AD, whichever occurs later.
- (2) For structurally significant item tasks specified in Subject 05-10-10, "Airworthiness Limitations," of Chapter 05, "Airworthiness Limitations," of the BAE Systems (Operations) Limited Jetstream Series 4100 AMM, Revision 35, dated February 15, 2011: Prior to the accumulation of the applicable flight cycles specified in the "Initial Inspection" column in Subject 05-10-10, or within 90 days after the effective date of this AD, whichever occurs later.
- (3) For certification maintenance requirements tasks specified in Subject 05-10-20, "Certification Maintenance Requirements," of Chapter 05, "Airworthiness Limitations," of the BAE Systems (Operations) Limited Jetstream Series 4100 AMM, Revision 35, dated February 15, 2011: Prior to the accumulation of the applicable flight hours specified in the "Time Between Checks" column in Subject 05-10-20, or within 90 days after the effective date of this AD, whichever occurs

later; except for tasks that specify "first flight of the day" in the "Time Between Checks" column in Subject 05-10-20, the initial compliance time is the first flight of the next day after doing the revision required by paragraph (i) of this AD, or within 90 days after the effective date of this AD, whichever occurs later.

# **Credit for Actions Accomplished in Accordance With Previous Service Information**

(j) Actions done before the effective date of this AD in accordance with Subjects 05-10-10, "Airworthiness Limitations"; 05-10-20, "Certification Maintenance Requirements"; and 05-10-30, "Critical Design Configuration Control Limitations (CDCCL)—Fuel System"; of Chapter 05, "Airworthiness Limitations," of the BAE Systems (Operations) Limited Jetstream Series 4100 AMM, Revision 33, dated February 15, 2010; are acceptable for compliance with the requirements of paragraph (i) of this AD.

# No Alternative Actions, Intervals, and/or CDCCLs

(k) After accomplishing the revision required by paragraph (i) of this AD, no alternative actions (e.g., inspections), intervals, and/or CDCCLs may be used unless the actions, intervals, and/or CDCCLs are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (l) of this AD.

### **FAA AD Differences**

**Note 2:** This AD differs from the MCAI and/or service information as follows: Although EASA Airworthiness Directive 2010-0098, dated May 27, 2010, specifies both revising the maintenance program to include limitations, and doing certain repetitive actions (e.g., inspections) and/or maintaining CDCCLs, this AD only requires the revision. Requiring a revision of the maintenance program, rather than requiring individual repetitive actions and/or maintaining CDCCLs, requires operators to record AD compliance only at the time the revision is made. Repetitive actions and/or maintaining CDCCLs specified in the airworthiness limitations must be complied with in accordance with 14 CFR 91.403(c).

### **Other FAA AD Provisions**

- (l) The following provisions also apply to this AD:
- (1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1175; fax (425) 227-1149. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.
- (2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

### **Related Information**

(m) Refer to Mandatory Continuing Airworthiness Information (MCAI) European Aviation Safety Agency (EASA) Airworthiness Directive 2010-0098, dated May 27, 2010; Subjects 05-10-10, "Airworthiness Limitations"; 05-10-20, "Certification Maintenance Requirements"; and 05-10-30, "Critical Design Configuration Control Limitations (CDCCL)—Fuel System"; of Chapter 05, "Airworthiness Limitations," of the BAE Systems (Operations) Limited Jetstream Series 4100 AMM, Revision 31, dated February 15, 2009; and Subjects 05-10-10, "Airworthiness Limitations"; 05-10-20, "Certification Maintenance Requirements"; and 05-10-30, "Critical Design Configuration Control Limitations (CDCCL)—Fuel System"; of Chapter 05, "Airworthiness Limitations," of the BAE Systems (Operations) Limited Jetstream Series 4100 AMM, Revision 35, dated February 15, 2011; for related information.

# **Material Incorporated by Reference**

- (n) You must use the following service information to do the applicable actions required by this AD, unless the AD specifies otherwise.
- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of Subjects 05-10-10, "Airworthiness Limitations"; 05-10-20, "Certification Maintenance Requirements"; and 05-10-30, "Critical Design Configuration Control Limitations (CDCCL)—Fuel System"; of Chapter 05, "Airworthiness Limitations," of the BAE Systems (Operations) Limited Jetstream Series 4100 AMM, Revision 35, dated February 15, 2011; under 5 U.S.C. 552(a) and 1 CFR part 51 on November 23, 2011. Page 1 of the Publications Transmittal of the BAE Systems (Operations) Limited Jetstream Series 4100 AMM is the only page that shows the revision level of this document.
- (2) The Director of the Federal Register previously approved the incorporation by reference of Subjects 05-10-10, "Airworthiness Limitations"; 05-10-20, "Certification Maintenance Requirements"; 05-10-30, "Critical Design Configuration Control Limitations (CDCCL)—Fuel System"; of Chapter 05, "Airworthiness Limitations," of the BAE Systems (Operations) Limited Jetstream Series 4100 AMM, Revision 31, dated February 15, 2009; on June 11, 2009 (74 FR 21246, May 7, 2009).
- (3) For service information identified in this AD, contact BAE SYSTEMS (Operations) Limited, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone +44 1292 675207; fax +44 1292 675704; e-mail RApublications@baesystems.com; Internet
- http://www.baesystems.com/Businesses/RegionalAircraft/index.htm.
- (4) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.
- (5) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

Issued in Renton, Washington, on September 23, 2011. Ali Bahrami,

Manager, Transport Airplane Directorate,

Aircraft Certification Service.



www.faa.gov/aircraft/safety/alerts/ www.gpoaccess.gov/fr/advanced.html

**2011-21-07 Bombardier**, **Inc.**: Amendment 39-16830. Docket No. FAA-2011-0564; Directorate Identifier 2011-NM-021-AD.

### **Effective Date**

(a) This airworthiness directive (AD) becomes effective November 23, 2011.

#### **Affected ADs**

(b) None.

# **Applicability**

(c) This AD applies to Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, serial numbers 7003 through 7067 inclusive, 7069 through 7990 inclusive, 8000 through 8107 inclusive, and subsequent; all Model CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes; all Model CL-600-2D15 (Regional Jet Series 705) airplanes; and all Model CL-600-2D24 (Regional Jet Series 900) airplanes; certificated in any category.

# Subject

(d) Air Transport Association (ATA) of America Code 34: Navigation.

#### Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

There have been several in-service reports of airspeed mismatch between the pilot and co-pilot's airspeed indicators. It was discovered that during or after heavy rain, the pitot-static tubing may become partially or completely blocked by water, which fails to enter the drain bottles. Investigation revealed that drain bottles used in the primary pitot-static system include check valves, which impede the entry of water into the drain bottle. This condition, if not corrected, may result in erroneous airspeed and altitude indications.

\* \* \* \* \* \*

### **Compliance**

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

### **Actions**

(g) Within 9 months after the effective date of this AD, do the actions specified in paragraphs (g)(1) and (g)(2) of this AD, as applicable.

- (1) For Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes identified in Bombardier Service Bulletin 601R-34-147, Revision B, dated March 8, 2011: Replace water accumulator assemblies having part numbers (P/N) 50029-001, 9435015, 50030-001, and 9435014 installed on the pitot and static lines of the air data computer (ADC) with new or serviceable water accumulator assemblies having P/N 50036-001, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 601R-34-147, Revision B, dated March 8, 2011.
- (2) For Model CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705), and CL-600-2D24 (Regional Jet Series 900) airplanes: Replace water accumulator assemblies having P/N 50033-001 installed on the pitot and static lines of the ADC with new or serviceable water accumulator assemblies having P/N 50036-001, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA-34-030, Revision B, dated March 23, 2010.

#### **Parts Installation**

(h) As of the effective date of this AD, no person may install on any airplane a water accumulator assembly, P/N 50029-001, 9435015, 50030-001, or 9435014 for Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, or P/N 50033-001 for Model CL-600-2C10 (Regional Jet Series 700, 701, & 702), Model CL-600-2D15 (Regional Jet Series 705), and Model CL-600-2D24 (Regional Jet Series 900) airplanes on the pitot and static lines of the ADC.

# Credit for Actions Accomplished in Accordance With Previous Service Information

- (i) Replacing water accumulator assemblies in accordance with Bombardier Service Bulletin 670BA-34-147, dated April 1, 2009; or Revision A, dated November 3, 2009 ((for Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes)), before the effective date of this AD is acceptable for compliance with the corresponding replacement required by paragraph (g)(1) of this AD.
- (j) Replacing water accumulator assemblies in accordance with Bombardier Service Bulletin 670BA-34-030, dated April 1, 2009; or Revision A, dated November 3, 2009 ((for Model CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705), and CL-600-2D24 (Regional Jet Series 900) airplanes)); before the effective date of this AD, is acceptable for compliance with the corresponding replacement required by paragraph (g)(2) of this AD.

#### **FAA AD Differences**

**Note 1:** This AD differs from the MCAI and/or service information as follows: No differences.

#### **Other FAA AD Provisions**

- (k) The following provisions also apply to this AD:
- (1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone: (516) 228-7300; fax: (516) 794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.
- (2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are

considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

#### **Related Information**

(1) Refer to MCAI Transport Canada Civil Aviation Airworthiness Directive CF-2010-37, dated October 28, 2010; Bombardier Service Bulletin 601R-34-147, Revision B, dated March 8, 2011; and Bombardier Service Bulletin 670BA-34-030, Revision B, dated March 23, 2010; for related information.

# **Material Incorporated by Reference**

- (m) You must use Bombardier Service Bulletin 601R-34-147, Revision B, dated March 8, 2011; and Bombardier Service Bulletin 670BA-34-030, Revision B, dated March 23, 2010; as applicable; to do the actions required by this AD, unless the AD specifies otherwise.
- (1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; phone: 514-855-5000; fax: 514-855-7401; e-mail: thd.crj@aero.bombardier.com; Internet: http://www.bombardier.com.
- (3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.
- (4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

Issued in Renton, Washington, on September 28, 2011. Ali Bahrami, Manager, Transport Airplane Directorate,

Aircraft Certification Service.



www.faa.gov/aircraft/safety/alerts/ www.gpoaccess.gov/fr/advanced.html

**2011-21-08 SICMA AERO SEAT:** Amendment 39-16831. Docket No. FAA-2010-0040; Directorate Identifier 2008-NM-203-AD.

### **Effective Date**

(a) This airworthiness directive (AD) becomes effective November 23, 2011.

### **Affected ADs**

(b) None.

# **Applicability**

(c) This AD applies to Sicma Aero Seat 88xx, 89xx, 90xx, 91xx, 92xx, 93xx, 95xx, and 96xx series passenger seat assemblies identified in Annex 1, Issue 2, dated March 19, 2004, of Sicma Aero Seat Service Bulletin 90-25-013, Issue 4, dated March 19, 2004, that have backrest links having part numbers (P/Ns) 90-000200-104-1 and 90-000200-104-2; and that are installed on, but not limited to, the airplanes identified in table 1 of this AD, certificated in any category. This AD does not apply to Sicma Aero Seat series 9140, 9166, 9173, 9174, 9184, 9188, 9196, 91B7, 91B8, 91C0, 91C2, 91C4, 91C5, 9301, and 9501 passenger seat assemblies.

**Table 1–Certain Affected Airplane Models** 

| Manufacturer                              | Model  |
|---|--|
| Airbus                                    | A300 airplanes   |
| Airbus                                    | A310, A318, A319, A320, A321 series airplanes  |
| ATR – GIE Avions de<br>Transport Régional | ATR42-200, -300, -320, and -500 airplanes  |
| ATR – GIE Avions de<br>Transport Régional | ATR72-101, -201, -102, -202, -211, -212, and -212A airplanes   |
| The Boeing Company                        | 727, 727C, 727-100, 727-100C, 727-200, and 727-200F series airplanes   |
| The Boeing Company                        | 737-100, -200, -200C, -300, -400, -500, -600, -700, -700C, -800, -900, and -900ER series airplanes,                                    |
| The Boeing Company                        | 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP series airplanes |
| The Boeing Company                        | 757-200, -200PF, -200CB, and -300 series airplanes   |

| FF1 - D - C          |   |
|----------------------|---|
| The Boeing Company   | 767-200, -300, -300F, and -400ER series airplanes   |
| Bombardier, Inc.     | CL-600-1A11 (CL-600), CL-600-2A12 (CL-601), and CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604) airplanes  |
| Bombardier, Inc.     | CL-600-2B19 (Regional Jet Series 100 & 440) airplanes   |
| Bombardier, Inc.     | CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes   |
| Bombardier, Inc.     | CL-600-2D15 (Regional Jet Series 705) airplanes   |
| Bombardier, Inc.     | CL-600-2D24 (Regional Jet Series 900) airplanes   |
| Bombardier, Inc.     | DHC-8-100, DHC-8-200, DHC-8-300, and DHC-8-400 airplanes  |
| Fokker Services B.V. | F.27 Mark 050, 100, 200, 300, 400, 500, 600, and 700 airplanes  |
| Fokker Services B.V. | F.28 Mark 0070, 0100, 1000, 2000, 3000, and 4000 airplanes  |
| The Boeing Company   | DC-8-11, DC-8-12, DC-8-21, DC-8-31, DC-8-32, DC-8-33, DC-8-41, DC-8-42, DC-8-43, DC-8-51, DC-8-52, DC-8-53, DC-8-55, DC-8F-54, DC-8F-55, DC-8-61, DC-8-62, DC-8-63, DC-8-61F, DC-8-62F, DC-8-63F, DC-8-71, DC-8-72, DC-8-73, DC-8-71F, DC-8-72F, and DC-8-73F airplanes |
| The Boeing Company   | DC-9-11, DC-9-12, DC-9-13, DC-9-14, DC-9-15, DC-9-15F, DC-9-21, DC-9-31, DC-9-32, DC-9-32 (VC-9C), DC-9-32F, DC-9-33F, DC-9-34, DC-9-34F, DC-9-32F (C-9A, C-9B), DC-9-41, DC-9-51, DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), and DC-9-87 (MD-87) airplanes     |
| The Boeing Company   | DC-10-10, DC-10-10F, DC-10-15, DC-10-30, DC-10-30F (KC-10A and KDC-10), DC-10-40, and DC-10-40F airplanes   |
| The Boeing Company   | MD-11 and MD-11F airplanes  |

**Note 1:** This AD applies to Sicma Aero Seat passenger seat assemblies as installed on any airplane, regardless of whether the airplane has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance according to paragraph (g)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

# Subject

(d) Air Transport Association (ATA) of America Code 25: Equipment/Furnishings.

### Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

Cracks have been found on seats [with] backrest links P/N (part number) 90-000200-104-1 and 90-000200-104-2. These cracks can significantly affect the structural integrity of seat backrests.

Failure of the backrest links could result in injury to an occupant during emergency landing conditions. The required actions include a general visual inspection for cracking of the backrest links; replacement with new, improved links if cracking is found; and eventual replacement of all links with new, improved links.

# **Actions and Compliance**

- (f) Unless already done, do the following actions.
- (1) At the later of the compliance times specified in paragraphs (f)(1)(i) and (f)(1)(ii) of this AD, do a general visual inspection of the backrest links having P/Ns 90-000200-104-1 and 90-000200-104-2, in accordance with Part One of Sicma Aero Seat Service Bulletin 90-25-013, Issue 4, dated March 19, 2004, including Annex 1, Issue 2, dated March 19, 2004:
  - (i) Before 6,000 flight hours on the backrest link since new.
- (ii) Within 900 flight hours or 5 months after the effective date of this AD, whichever occurs later.
- (2) If, during the inspection required by paragraph (f)(1) of this AD, cracking is found between the side of the backrest link and the lock-out pin hole but the cracking does not pass this lock-out pin hole (refer to Figure 2 of Sicma Aero Seat Service Bulletin 90-25-013, Issue 4, dated March 19, 2004, including Annex 1, Issue 2, dated March 19, 2004): Within 600 flight hours or 3 months after doing the inspection, whichever occurs first, replace both backrest links of the affected seat with new, improved backrest links having P/Ns 90-100200-104-1 and 90-100200-104-2, in accordance with Part Two of Sicma Aero Seat Service Bulletin 90-25-013, Issue 4, dated March 19, 2004, including Annex 1, Issue 2, dated March 19, 2004.
- (3) If, during the inspection required by paragraph (f)(1) of this AD, cracking is found that passes beyond the lock-out pin hole (refer to Figure 2 of Sicma Aero Seat Service Bulletin 90-25-013, Issue 4, dated March 19, 2004, including Annex 1, Issue 2, dated March 19, 2004): Before further flight, replace both backrest links of the affected seat with new, improved backrest links having P/Ns 90-100200-104-1 and 90-100200-104-2, in accordance with Part Two of Sicma Aero Seat Service Bulletin 90-25-013, Issue 4, dated March 19, 2004, including Annex 1, Issue 2, dated March 19, 2004.
- (4) If no cracking is found during the inspection required by paragraph (f)(1) of this AD: Do the replacement required by paragraph (f)(5) of this AD at the compliance time specified in paragraph (f)(5) of this AD.
- (5) At the later of the compliance times specified in paragraphs (f)(5)(i) and (f)(5)(ii) of this AD, replace the links, P/Ns 90-000200-104-1 and 90-000200-104-2, with new improved links, P/Ns 90-100200-104-1 and 90-100200-104-2, in accordance with Part Two of Sicma Aero Seat Service Bulletin 90-25-013, Issue 4, dated March 19, 2004, including Annex 1, Issue 2, dated March 19, 2004. Doing this replacement for an affected passenger seat assembly terminates the inspection requirements of paragraph (f)(1) of this AD for that passenger seat assembly.
- (i) Before 12,000 flight hours on the backrest links, P/Ns 90-000200-104-1 and 90-000200-104-2, since new.
- (ii) Within 900 flight hours or 5 months after the effective date of this AD, whichever occurs later.

### **Credit for Actions Done in Accordance With Previous Service Information**

(6) Actions done before the effective date of this AD in accordance with Sicma Aero Seat Service Bulletin 90-25-013, Issue 3, dated December 19, 2001, including Annex 1, Issue 1, dated June 26, 2001, are acceptable for compliance with the corresponding actions of this AD.

### **FAA AD Differences**

**Note 2:** This AD differs from the MCAI and/or service information as follows: The MCAI specifies doing repetitive inspections for cracking of links having over 12,000 flight hours since new until the replacement of the link is done. This AD does not include those repetitive inspections because we have reduced the compliance time for replacing those links. This AD requires replacing the link before 12,000 flight hours since new or within 900 flight hours or 5 months of the effective date of this AD, whichever occurs later.

#### Other FAA AD Provisions

- (g) The following provisions also apply to this AD:
- (1) Alternative Methods of Compliance (AMOCs): The Manager, Boston Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Jeffrey Lee, Aerospace Engineer, Boston Aircraft Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, Massachusetts 01803; telephone (781) 238-7161; fax (781) 238-7170. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.
- (2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

#### **Related Information**

(h) Refer to MCAI French Airworthiness Directive 2001-613(AB), dated December 12, 2001; and Sicma Aero Seat Service Bulletin 90-25-013, Issue 4, dated March 19, 2004, including Annex 1, Issue 2, dated March 19, 2004; for related information.

### **Material Incorporated by Reference**

- (i) You must use Sicma Aero Seat Service Bulletin 90-25-013, Issue 4, dated March 19, 2004, including Annex 1, Issue 2, dated March 19, 2004, to do the actions required by this AD, unless the AD specifies otherwise.
- (1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) For service information identified in this AD, contact Sicma Aero Seat, 7 Rue Lucien Coupet, 36100 ISSOUDUN, France, telephone: +33 (0) 2 54 03 39 39; fax: +33 (0) 2 54 03 39 00; e-mail: customerservices.sas@zodiacaerospace.com; Internet: http://www.sicma.zodiacaerospace.com/en/.
- (3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

Issued in Renton, Washington, on September 28, 2011. Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service.



www.faa.gov/aircraft/safety/alerts/ www.gpoaccess.gov/fr/advanced.html

**2011-21-09 Airbus:** Amendment 39-16832. Docket No. FAA-2011-0475; Directorate Identifier 2010-NM-138-AD.

## **Effective Date**

(a) This airworthiness directive (AD) becomes effective November 23, 2011.

# **Affected ADs**

(b) This AD supersedes AD 2007-25-15, Amendment 39-15297 (72 FR 69601, December 10, 2007).

# **Applicability**

(c) This AD applies to Airbus Model A300 B4-103, B4-203, and B4-2C airplanes; certificated in any category; equipped with main landing gear (MLG) retraction actuator having part number (P/N) C23129 fitted with sliding rod P/N C69029-2 or C69029-3.

# **Subject**

(d) Air Transport Association (ATA) of America Code 32: Landing gear.

#### Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

One operator reported a failure of the MLG [main landing gear] retraction actuator sliding rod. This incident occurred at a number of operating flight cycles lower than the limit value imposed by the MLG manufacturer.

This condition, if not detected and corrected, results in undampened extension of the MLG, leading to higher than usual loads on the MLG attachment. Higher loads affect the structural integrity of the MLG and could lead to MLG failure.

\* \* \* \* \* \*

# **Compliance**

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

### **Revised Compliance Times for Inspection of MLG Retraction Actuator and Corrective Actions**

(g) At the applicable time specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD: Remove the MLG retraction actuator having P/N C23129 and do a detailed and high frequency eddy current inspection for defects that exceed the criteria defined in Messier-Dowty Special Inspection Service Bulletin 470-32-806, dated October 27, 2005, of the retraction actuator sliding rods having P/N

C69029-2 or C69029-3, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-32-0450, Revision 02, dated July 28, 2009.

- (1) For airplanes on which the retraction actuator sliding rod has accumulated 12,000 or fewer total flight cycles as of the effective date of this AD: Inspect at the later of the times specified in paragraphs (g)(1)(i) and (g)(1)(ii) of this AD.
  - (i) Before the accumulation of 12,000 total flight cycles on the retraction actuator sliding rod.
- (ii) Within 2,000 flight cycles or 24 months after the effective date of this AD, whichever occurs first.
- (2) For airplanes on which the retraction actuator sliding rod has accumulated more than 12,000 total flight cycles, and 22,000 or fewer total flight cycles, as of the effective date of this AD: Inspect at the earliest of the times specified in paragraphs (g)(2)(i), (g)(2)(ii), and (g)(2)(iii) of this AD.
  - (i) Before the accumulation of 23,000 total flight cycles on the retraction actuator sliding rod.
  - (ii) Within 2,000 flight cycles after the effective date of this AD.
  - (iii) Within 24 months after the effective date of this AD.
- (3) For airplanes on which the retraction actuator sliding rod has accumulated more than 22,000 total flight cycles as of the effective date of this AD: Inspect within 1,000 flight cycles or 12 months after the effective date of this AD, whichever occurs first.
- (h) Thereafter, repeat the inspections required by paragraph (g) of this AD at intervals not to exceed 12,000 flight cycles.
- (i) If, during any inspection required by paragraph (g) or (h) of this AD, any defect is detected that exceeds the criteria defined in Messier-Dowty Special Inspection Service Bulletin 470-32-806, dated October 27, 2005, before further flight, replace the affected sliding rod with a serviceable unit in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-32-0450, Revision 02, dated July 28, 2009.
- (j) Before the accumulation of 32,000 flight cycles on any retraction actuator sliding rod, it must be replaced with a serviceable unit in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-32-0450, Revision 02, dated July 28, 2009. Parts removed from an airplane as required by this paragraph must be returned to Messier-Dowty within 30 days after removing the part from the airplane.
- (k) As of the effective date of this AD, any MLG retraction actuator sliding rod having P/N C69029-2 or C69029-3 that has accumulated less than 32,000 total flight cycles, may be installed on any airplane, provided that the inspections required by paragraphs (g) and (h) of this AD are accomplished at the compliance times specified in paragraphs (g) and (h) of this AD and all applicable replacements required by paragraphs (i) and (j) of this AD are done.

# Lubrication of the MLG Assembly

(l) Within 1,500 flight hours after the effective date of this AD: Clean and lubricate the MLG assembly, in accordance with Task 321112-0505-1 "Main Landing Gear Assy," of Section 2-32, "Systems and Powerplant Program: Landing Gear," of the Airbus A300 Maintenance Planning Document, Revision 30, dated April 1, 2010. Repeat the cleaning and lubrication thereafter at intervals not to exceed 1,500 flight hours.

### Credit for Actions Accomplished in Accordance With Previous Service Information

(m) Inspections accomplished before the effective date of this AD, in accordance with Airbus Mandatory Service Bulletin A300-32-0450, dated December 1, 2005; or Airbus Mandatory Service Bulletin A300-32-0450, Revision 01, dated May 10, 2006; are acceptable for compliance with the corresponding requirements of this AD.

### **FAA AD Differences**

**Note 1:** This AD differs from the MCAI and/or service information as follows: No differences.

### **Other FAA AD Provisions**

- (n) The following provisions also apply to this AD:
- (1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2125; fax (425) 227-1149. Information may be e-mailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD. AMOCs approved previously in accordance with AD 2007-25-15, Amendment 39-15297 (72 FR 69601, December 10, 2007), are approved as AMOCs for the corresponding provisions of this AD.
- (2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

#### **Related Information**

(o) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2010-0102, dated June 8, 2010; Airbus Mandatory Service Bulletin A300-32-0450, Revision 02, dated July 28, 2009; Messier-Dowty Special Inspection Service Bulletin 470-32-806, dated October 27, 2005; and Task 321112-0505-1, "Main Landing Gear Assy," of Section 2-32, "Systems and Powerplant Program: Landing Gear," of the Airbus A300 Maintenance Planning Document, Revision 30, dated April 1, 2010; for related information.

# **Material Incorporated by Reference**

- (p) You must use Airbus Mandatory Service Bulletin A300-32-0450, Revision 02, excluding Appendix 1, dated July, 28, 2009; Messier-Dowty Special Inspection Service Bulletin 470-32-806, dated October 27, 2005; and Task 321112-0505-1, "Main Landing Gear Assy," of Section 2-32, "Systems and Powerplant Program: Landing Gear," of the Airbus A300 Maintenance Planning Document, Revision 30, dated April 1, 2010; to do the actions required by this AD, unless the AD specifies otherwise. (The revision level of the Airbus A300 Maintenance Planning Document is identified in only the title page and transmittal letter of this document.)
- (1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) For Messier-Dowty service information identified in this AD, contact Messier Services Americas, Customer Support Center, 45360 Severn Way, Sterling, Virginia 20166-8910; telephone 703-450-8233; fax 703-404-1621; Internet https://techpubs.services/messier-dowty.com.
- (3) For Airbus service information identified in this AD, contact Airbus SAS-EAW (Airworthiness Office), 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; e-mail account.airworth-eas@airbus.com; Internet http://www.airbus.com.

- (4) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.
- (5) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

Issued in Renton, Washington, on September 28, 2011. Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service.



www.faa.gov/aircraft/safety/alerts/ www.gpoaccess.gov/fr/advanced.html

**2011-21-14 Airbus:** Amendment 39-16837. Docket No. FAA-2011-0264; Directorate Identifier 2009-NM-244-AD.

### **Effective Date**

(a) This airworthiness directive (AD) becomes effective November 23, 2011.

### **Affected ADs**

(b) This AD supersedes AD 2008-03-04, Amendment 39-15353 (73 FR 5731, January 31, 2008).

# **Applicability**

- (c) This AD applies to the airplanes identified in paragraphs (c)(1) and (c)(2) of this AD.
- (1) Airbus Model A300 B4-601, B4-603, B4-620, and B4-622 airplanes (without trim tank), all serial numbers, certificated in any category, except airplanes on which Airbus Modifications 12226, 12365, 12490, and 12308 have been incorporated in production, or on which the service bulletins listed in paragraphs (c)(1)(i) and (c)(1)(ii) of this AD have been performed in service.
- (i) Airbus Mandatory Service Bulletin A300-28-6064, Revision 04, dated August 24, 2009; or Revision 05, dated September 27, 2010.
  - (ii) Airbus Service Bulletin A300-28-6068, dated July 20, 2005.
- (2) Airbus Model A300 B4-605R, B4-622R, F4-605R, and F4-622R airplanes and A300 C4-605R Variant F airplanes (fitted with a trim tank), all serial numbers, certificated in any category, except airplanes on which Airbus Modifications 12226, 12365, 12490, 12308, 12294, and 12476 have been incorporated in production, or on which the service bulletins listed in paragraphs (c)(2)(i), (c)(2)(ii), and (c)(2)(iii) of this AD have been performed in service.
  - (i) Airbus Mandatory Service Bulletin A300-28-6064, Revision 03, dated December 15, 2008.
  - (ii) Airbus Service Bulletin A300-28-6068, dated July 20, 2005.
- (iii) Airbus Service Bulletin A300-28-6077, dated July 25, 2005; or Revision 01, dated October 26, 2006.

# **Subject**

(d) Air Transport Association (ATA) of America Code 28: Fuel.

## Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

[T]he FAA has published SFAR 88 (Special Federal Aviation Regulation 88). \* \* \*

Under this regulation, all holders of type certificates for passenger transport aeroplanes \* \* \* are required to conduct a design review against explosion risks. The replacement of some types of P-clips and improvement of the electrical bonding of the equipment in the fuel tanks [were] are rendered mandatory \* \* \*.

\* \* \* \* \*

Subsequently, an internal review \*\*\* led \*\*\* to \*\*\* an additional check [for blue coat] of the bonding points in the centre tank. \*\*\*

More recently, another internal review [introduced] additional work [installing bonding points] for aeroplanes under Configuration 03 \* \* \* and additional work [bonding the fuel jettison system—blanking plates] on the wing tanks for aeroplanes under Configuration 07 \* \* \*.

The unsafe condition is damage to wiring in the wing, center, and trim fuel tanks, due to failed P-clips used for retaining the wiring and pipes, which could result in a possible fuel ignition source in the wing, center, or trim fuel tanks.

# **Compliance**

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Restatement of Requirements of AD 2008-03-04, Amendment 39-15353 (73 FR 5731, January 31, 2008) With Revised Service Information

# **Actions and Compliance**

- (g) For airplanes identified in paragraphs (g)(1) and (g)(2) of this AD: Within 40 months after March 6, 2008 (the effective date of AD 2008-03-04, Amendment 39-15353 (73 FR 5731, January 31, 2008)), unless already done, do the applicable actions required by paragraphs (g)(3), (g)(4), and (g)(5) of this AD.
- (1) Airbus Model A300 B4-600 series airplanes (without trim tank), all serial numbers, except airplanes on which Airbus Modifications 12226, 12365, 12490, and 12308 have been incorporated in production, or Airbus Service Bulletins A300-28-6064, Revision 01, dated April 3, 2007; and A300-28-6068, dated July 20, 2005; have been performed in service.
- (2) Airbus Model A300 B4-600R, A300 C4-600R, and A300 F4-600R series airplanes (fitted with a trim tank), all serial numbers, except airplanes on which Airbus Modifications 12226, 12365, 12490, 12308, 12294, and 12476 have been incorporated in production, or on which the service bulletins listed in paragraphs (g)(2)(i), (g)(2)(ii), and (g)(2)(iii) of this AD have been performed in service.
  - (i) Airbus Service Bulletin A300-28-6064, Revision 01, dated April 3, 2007.
  - (ii) Airbus Service Bulletin A300-28-6068, dated July 20, 2005.
- (iii) Airbus Service Bulletin A300-28-6077, dated July 25, 2005; or A300-28-6077, Revision 01, dated October 26, 2006.
- (3) Remove NSA5516-XXND or NSA5516-XXNJ type P-clips, used in the wing and center fuel tanks to retain wiring and pipes, and replace them by NSA5516-XXNF type P-clips in accordance with the instructions of Airbus Service Bulletin A300-28-6068, dated July 20, 2005.
- (4) Check the electrical bonding points in the center tank and do all applicable related investigative and corrective actions, and install additional bonding leads and electrical bonding points in the wing and center fuel tanks in accordance with the instructions of Airbus Service Bulletin A300-28-6064, Revision 01, dated April 3, 2007; Airbus Mandatory Service Bulletin A300-28-6064, Revision 02, dated March 10, 2008; Airbus Mandatory Service Bulletin A300-28-6064, Revision 03, dated December 15, 2008; Airbus Mandatory Service Bulletin A300-28-6064, Revision 04, dated August 24, 2009; or Airbus Mandatory Service Bulletin A300-28-6064, Revision 05, dated September 27, 2010. Do all applicable related investigative and corrective actions before further flight. As of the effective date of this AD, only use Airbus Mandatory Service Bulletin A300-28-6064, Revision 05, dated September 27, 2010.

- (5) For airplanes fitted with a trim tank, in addition to the actions defined in paragraphs (g)(3) and (g)(4) of this AD, install bonding leads and electrical bonding points in the trim tanks, in accordance with the instructions of Airbus Service Bulletin A300-28-6077, Revision 01, dated October 26, 2006.
- (6) Actions done before March 6, 2008, in accordance with Airbus Service Bulletin A300-28-6064, dated July 28, 2005, for aircraft under configuration 05, as defined in Airbus Service Bulletin A300-28-6064, dated July 28, 2005, are considered acceptable for compliance with the requirements of paragraph (g)(4) of this AD.
- (7) Actions done before March 6, 2008, in accordance with Airbus Service Bulletin A300-28-6077, dated July 25, 2005, for aircraft under configuration 05, as defined in Airbus Service Bulletin A300-28-6077, dated July 25, 2005, are considered acceptable for compliance with the requirements of paragraph (g)(5) of this AD.

# **New Requirments of This AD**

#### **Additional Actions**

- (h) Within 30 months after the effective date of this AD, do the applicable actions required by paragraphs (h)(1), (h)(2), and (h)(3) of this AD.
- (1) For airplanes that have been modified before the effective date of this AD in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-28-6064, dated July 28, 2005, or Revision 01, dated April 3, 2007; or Airbus Mandatory Service Bulletin A300-28-6064, Revision 02, dated March 10, 2008: Do the additional work on the center tank specified in Airbus Mandatory Service Bulletin A300-28-6064, Revision 03, dated December 15, 2008 (i.e., a check for blue coat at additional bonding points and all applicable related investigative and corrective actions), in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-28-6064, Revision 03, dated December 15, 2008; Revision 04, dated August 24, 2009; or Revision 05, dated September 27, 2010. Do all applicable related investigative and corrective actions before further flight.
- (2) For configuration 03 airplanes, as defined in Airbus Mandatory Service Bulletin A300-28-6064, Revision 04, dated August 24, 2009; or Revision 05, dated September 27, 2010; that have been modified before the effective date of this AD in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-28-6064, Revision 01, dated April 3, 2007; or Airbus Mandatory Service Bulletin A300-28-6064, Revision 02, dated March 10, 2008, or Revision 03, dated December 15, 2008: Do the additional work on the center tank (i.e., install bonding points), in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-28-6064, Revision 04, dated August 24, 2009; or Revision 05, dated September 27, 2010.
- (3) For configuration 07 airplanes, as defined in Airbus Mandatory Service Bulletin A300-28-6064, Revision 04, dated August 24, 2009; or Revision 05, dated September 27, 2010; that have been modified before the effective date of this AD in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-28-6064, dated July 28, 2005; or Revision 01, dated April 3, 2007; or Airbus Mandatory Service Bulletin A300-28-6064, Revision 02, dated March 10, 2008, or Revision 03, dated December 15, 2008: Do the additional work on the wing tanks (i.e., bond the fuel jettison system–blanking plates), in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-28-6064, Revision 04, dated August 24, 2009; or Revision 05, dated September 27, 2010.

### **FAA AD Differences**

**Note 1:** This AD differs from the MCAI and/or service information as follows: The MCAI provides a compliance time of 8 months to do the actions specified in paragraph (h) of this AD. This AD requires that the actions specified in paragraph (h) of this AD be done within 30 months.

### **Other FAA AD Provisions**

- (i) The following provisions also apply to this AD:
- (1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2125; fax (425) 227-1149. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD. AMOCs approved previously in accordance with AD 2008-03-04, Amendment 39-15353 (73 FR 5731, January 31, 2008), are approved as AMOCs for the corresponding provisions of this AD.
- (2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

# **Related Information**

- (j) Refer to MCAI EASA Airworthiness Directive 2010-0074, dated April 16, 2010, and the following service information, for related information.
  - (1) Airbus Mandatory Service Bulletin A300-28-6064, Revision 03, dated December 15, 2008.
  - (2) Airbus Mandatory Service Bulletin A300-28-6064, Revision 04, dated August 24, 2009.
  - (3) Airbus Mandatory Service Bulletin A300-28-6064, Revision 05, dated September 27, 2010.
  - (4) Airbus Service Bulletin A300-28-6068, dated July 20, 2005.
  - (5) Airbus Service Bulletin A300-28-6077, Revision 01, dated October 26, 2006.

### **Material Incorporated by Reference**

- (k) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR Part 51 of the following service information on the date specified.
- (1) Airbus Mandatory Service Bulletin A300-28-6064, Revision 03, dated December 15, 2008, approved for IBR November 23, 2011.
- (2) Airbus Mandatory Service Bulletin A300-28-6064, Revision 04, dated August 24, 2009, approved for IBR November 23, 2011.
- (3) Airbus Mandatory Service Bulletin A300-28-6064, Revision 05, dated September 27, 2010, approved for IBR November 23, 2011.
- (4) Airbus Service Bulletin A300-28-6068, dated July 20, 2005, approved for IBR on March 6, 2008 (73 FR 5731, January 31, 2008).
- (5) Airbus Service Bulletin A300-28-6077, Revision 01, dated October 26, 2006, approved for IBR on March 6, 2008 (73 FR 5731, January 31, 2008).
- (6) For service information identified in this AD, contact Airbus SAS–EAW (Airworthiness Office), 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; e-mail: account.airworth-eas@airbus.com; Internet http://www.airbus.com.
- (7) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(8) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

Issued in Renton, Washington, on October 3, 2011. Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service.



www.faa.gov/aircraft/safety/alerts/ www.gpoaccess.gov/fr/advanced.html

**2011-21-15 Empresa Brasileira de Aeronautica S.A. (EMBRAER):** Amendment 39-16838. Docket No. FAA-2011-0312; Directorate Identifier 2010-NM-159-AD.

## **Effective Date**

(a) This airworthiness directive (AD) becomes effective November 23, 2011.

#### **Affected ADs**

(b) None.

# **Applicability**

(c) This AD applies to Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB-135ER, -135KE, -135KL, and -135LR airplanes; and Model EMB-145, -145ER, -145MR, -145LR, -145MP, and -145EP airplanes; certificated in any category; equipped with titanium auxiliary power unit (APU) firewall part number (P/N) 145-47494-401, 145-26850-401, 145-26850-601, or 145-47494-403.

# Subject

(d) Air Transport Association (ATA) of America Code 53: Fuselage.

#### Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

This [Brazilian] AD results from reports of cracking in the firewall of the auxiliary power unit (APU). This AD is being issued to detect and correct this cracking, which could result in reduced structural integrity of the fuselage and empennage in the event that a fire penetrates through the firewall of the APU.

# **Compliance**

\* \* \* \* \*

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

# Actions

(g) Within 3,300 flight hours after the effective date of this AD, do a detailed inspection for cracking of the rearward and forward face of the APU firewall, including its attachment to the fuselage, removing neither the structural reinforcements nor the dampers, in accordance with Task 05-20-47-200-801-A, Rear Fuselage II–Aft of Rear Pressure Bulkhead–Internal General Visual Inspection, of Subject 5-20-47, Rear Fuselage II–Aft of Rear Pressure Bulkhead–Internal, and Task

- 05-20-57-200-801-A, Rear Fuselage II—Tail Cone Fairing—Internal General Visual Inspection, of Subject 5-20-57, Rear Fuselage II—Tail Cone Fairing—Internal, of Chapter 5, Time Limits Maintenance Checks, of EMBRAER EMB145 Aircraft Maintenance Manual, Part II, AMM-145/1124, Revision 54, dated April 28, 2011.
- (1) If no cracking is found during any inspection required by paragraph (g) of this AD, repeat the inspection thereafter at intervals not to exceed 6,600 flight hours, until the terminating action specified in paragraph (h) of this AD has been accomplished.
- (2) If any cracking is found during any inspection required by paragraph (g) of this AD, before further flight, repair in accordance with Subject 53-32-13, Rear Fuselage II–APU Firewall, of Chapter 53, Fuselage, of the EMBRAER EMB135, ERJ140, EMB145, Structural Repair Manual, SRM-145/1142, Revision 43, dated December 1, 2010; or in accordance with a method approved by the International Branch, ANM-116, Transport Airplane Directorate, FAA; or Agência Nacional de Aviação Civil (ANAC) (or its delegated agent). Within 6,600 flight hours after doing the repair, do the inspection required by paragraph (g) of this AD and repeat the inspection thereafter at intervals not to exceed 6,600 flight hours, until the terminating action specified in paragraph (h) of this AD has been accomplished.
- **Note 1:** For the purpose of this AD, a detailed inspection is: "An intensive examination of a specific item, installation or assembly to detect damage, failure or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirrors, magnifying lenses, etc., may be necessary. Surface cleaning and elaborate access procedures may be required."

# **Optional Terminating Action**

(h) Replacing the APU firewall having P/N 145-47494-401, 145-26850-401, 145-26850-601, or 145-47494-403, with a new APU firewall having P/N 145-47494-607, in accordance with the Accomplishment Instructions of EMBRAER Service Bulletin 145-53-0062, Revision 07, dated May 27, 2011, terminates the repetitive inspections required by paragraphs (g)(1) and (g)(2) of this AD.

## **Credit for Actions Accomplished in Accordance With Previous Service Information**

- (i) Actions done before the effective date of this AD, in accordance with Task 05-20-47-200-801-A, Rear Fuselage II—Aft of Rear Pressure Bulkhead—Internal General Visual Inspection, of Subject 5-20-47, Rear Fuselage II—Aft of Rear Pressure Bulkhead—Internal, of Chapter 5, Time Limits Maintenance Checks, of EMBRAER EMB145 Aircraft Maintenance Manual, Part II, AMM-145/1124, Revision 53, dated October 28, 2010, are acceptable for compliance with the requirements of paragraph (g) of this AD.
- (j) Actions done before the effective date of this AD, in accordance with the applicable service bulletin specified in table 1 of this AD, are acceptable for compliance with the requirements of paragraph (h) of this AD.

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| EMBRAER Service<br>Bulletin – | Revision – | Dated –           |
|-------------------------------|------------|-------------------|
| 145-53-0062                   | 06         | August 11, 2010   |
| 145-53-0062                   | 05         | May 20, 2008      |
| 145-53-0062                   | 04         | November 23, 2007 |

| 145-53-0062 | 03 | September 21, 2007 |
|-------------|----|--------------------|
| 145-53-0062 | 02 | January 25, 2006   |
| 145-53-0062 | 01 | October 28, 2005   |
| 145-53-0062 |    | July 29, 2005      |

#### **FAA AD Differences**

**Note 2:** This AD differs from the MCAI and/or service information as follows:

- (1) The MCAI AD does not specify how to do the inspection for cracking. This AD requires doing a detailed inspection of the rearward and forward face of the APU firewall, including its attachment to the fuselage, in accordance with Task 05-20-47-200-801-A, Rear Fuselage II—Aft of Rear Pressure Bulkhead—Internal General Visual Inspection, of Subject 5-20-47, Rear Fuselage II—Aft of Rear Pressure Bulkhead—Internal, and Task 05-20-57-200-801-A, Rear Fuselage II—Tail Cone Fairing—Internal General Visual Inspection, of Subject 5-20-57, Rear Fuselage II—Tail Cone Fairing—Internal, of Chapter 5, Time Limits Maintenance Checks, of EMBRAER EMB145 Aircraft Maintenance Manual, Part II, AMM-145/1124, Revision 54, dated April 28, 2011.
- (2) Where Subjects 5-20-47, Rear Fuselage II—Aft of Rear Pressure Bulkhead—Internal, and 5-20-57, Rear Fuselage II—Tail Cone Fairing—Internal, of Chapter 5, Time Limits Maintenance Checks, of EMBRAER EMB145 Aircraft Maintenance Manual, Part II, AMM-145/1124, Revision 54, dated April 28, 2011, specify an internal general visual inspection, this AD requires a detailed inspection.

#### **Other FAA AD Provisions**

- (k) The following provisions also apply to this AD:
- (1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1175; fax (425) 227-1149. Information may be e-mailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.
- (2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

#### **Related Information**

(l) Refer to MCAI ANAC Airworthiness Directive 2010-06-03R1, dated September 20, 2010; EMBRAER Service Bulletin 145-53-0062, Revision 07, dated May 27, 2011; Task 05-20-47-200-801-A, Rear Fuselage II—Aft of Rear Pressure Bulkhead—Internal General Visual Inspection, of Subject 5-20-47, Rear Fuselage II—Aft of Rear Pressure Bulkhead—Internal, and Task 05-20-57-200-801-A, Rear Fuselage II—Tail Cone Fairing—Internal General Visual Inspection, of Subject 5-20-57, Rear Fuselage II—Tail Cone Fairing—Internal, of Chapter 5, Time Limits Maintenance Checks, of

EMBRAER EMB145 Aircraft Maintenance Manual, Part II, AMM-145/1124, Revision 54, dated April 28, 2011; and Subject 53-32-13, Rear Fuselage II—APU Firewall, of Chapter 53, Fuselage, of the EMBRAER EMB135, ERJ140, EMB145, Structural Repair Manual, SRM-145/1142, Revision 43, dated December 1, 2010; for related information.

# **Material Incorporated by Reference**

- (m) You must use Task 05-20-47-200-801-A, Rear Fuselage II-Aft of Rear Pressure Bulkhead-Internal General Visual Inspection, of Subject 5-20-47, Rear Fuselage II-Aft of Rear Pressure Bulkhead-Internal, and Task 05-20-57-200-801-A, Rear Fuselage II-Tail Cone Fairing-Internal General Visual Inspection, of Subject 5-20-57, Rear Fuselage II-Tail Cone Fairing-Internal, of Chapter 5, Time Limits Maintenance Checks, of EMBRAER EMB145 Aircraft Maintenance Manual, Part II, AMM-145/1124, Revision 54, dated April 28, 2011; and Subject 53-32-13, Rear Fuselage II-APU Firewall, of Chapter 53, Fuselage, of the EMBRAER EMB135, ERJ140, EMB145, Structural Repair Manual, SRM-145/1142, Revision 43, dated December 1, 2010; to do the actions required by this AD, unless the AD specifies otherwise. If you accomplish the optional terminating action specified in this AD, you must use EMBRAER Service Bulletin 145-53-0062, Revision 07, dated May 27, 2011, to do those actions, unless the AD specifies otherwise. The revision level of the EMBRAER EMB145 Aircraft Maintenance Manual AMM-145/1124 is specified on only the title page and Chapter 5 List of Effective Pages of this document; the Chapter 5 title page of this document does not contain a revision level or date. The revision level of the EMBRAER EMB135, ERJ140, EMB145, Structural Repair Manual SRM-145/1142 is specified on only the title page and Chapter 53 List of Effective pages of this document; the Chapter 53 title page does not contain a revision level or date.
- (1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) For service information identified in this AD, contact Empresa Brasileira de Aeronautica S.A. (EMBRAER), Technical Publications Section (PC 060), Av. Brigadeiro Faria Lima, 2170–Putim–12227-901 São Jose dos Campos–SP–BRASIL; telephone +55 12 3927-5852 or +55 12 3309-0732; fax +55 12 3927-7546; e-mail distrib@embraer.com.br; Internet: http://www.flyembraer.com.
- (3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.
- (4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

Issued in Renton, Washington, on October 3, 2011. Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service.



www.faa.gov/aircraft/safety/alerts/ www.gpoaccess.gov/fr/advanced.html

**2011-22-01 Rolls-Royce Deutschland Ltd & Co KG (Formerly Rolls-Royce Deutschland GmbH, formerly BMW Rolls-Royce GmbH)]:** Amendment 39-16842; Docket No. FAA-2011-0684; Directorate Identifier 2011-NE-27-AD.

#### **Effective Date**

(a) This airworthiness directive (AD) becomes effective November 23, 2011.

#### Affected ADs

(b) None.

# **Applicability**

(c) This AD applies to all Rolls-Royce Deutschland BR700-710A1-10 and BR700-710A2-20 turbofan engines, all BR700-710C4-11 model engines that have hardware configuration standard 710C4-11 engraved on the engine data plate (Service Bulletin SB-BR700-72-101466 standard not incorporated), and all BR700-710C4-11 model engines that have hardware configuration standard 710C4-11/10 engraved on the engine data plate (Service Bulletin SB-BR700-72-101466 standard incorporated). These engines are installed on, but not limited to, Bombardier BD-700-1A10 and BD-700-1A11 airplanes and Gulfstream GV (G500) and GV-SP (G550) airplanes.

#### Reason

#### (d) This AD results from:

Analysis of service data carried out by Rolls-Royce Deutschland has shown that the effect of touch-and-go and overshoot on life cycle counting is higher than anticipated. Therefore, the life cycle counting method for touch-and-go and overshoot as defined by the Time Limits Manual needs to be changed to reflect this higher effect on life.

We are issuing this AD to prevent failure of high-energy, life-limited parts, uncontained engine failure, and damage to the airplane.

# **Actions and Compliance**

- (e) Unless already done, do the following actions.
- (1) Within 30 days after the effective date of this AD, revise the airworthiness limitations section (ALS) of the operators' approved maintenance program (reference the Time Limits Manual (TLM), chapters 05-00-01 and 05-00-02 of the applicable engine manuals (EMs)) to remove the requirement to record each touch-and-go or overshoot as 1/5 of a flight cycle (FC) on an engine installed on an airplane used for Pilot Training.
- (2) Within 30 days after the effective date of this AD, revise the ALS of the operators' approved maintenance program (reference the TLM, chapters 05-00-01 and 05-00-02 of the applicable EMs) to add a requirement to record each touch-and-go or overshoot as 1 FC to the life of all critical parts and the fan blades.

- (3) Within 120 days after the effective date of this AD, determine the number of touch-and-go's and overshoots that each individual critical part except the fan shaft and LP turbine rotor shaft has experienced since entry into service for Pilot Training.
- (i) If the number of touch-and-go's and overshoots on an individual critical part is less than one percent of the total number of FCs on the critical part, no further action is required by this AD.
- (ii) If the number of touch-and-go's and overshoots on an individual critical part is one percent or more of the total number of FCs on the critical part, disregard the previous calculations of life on that individual critical part and retrospectively re-calculate the accumulated FCs of that individual critical part by the addition of one FC for every touch-and-go and overshoot to the total number of FCs.

# **Definitions**

- (f) A touch-and-go is a phase of a flight where a landing approach of an airplane is continued to the touch-down point and the airplane immediately takes off again without stopping.
- (g) An overshoot is a phase of a flight where a landing approach of an airplane is not continued to the touch-down point. This includes missed approaches due to safety reasons, weather minimums, airplane engine configurations, runway incursions, and any other undetermined causes.

# **FAA AD Differences**

- (h) This AD differs from the Mandatory Continuing Airworthiness Information (MCAI) and/or service information as follows:
- (1) This AD requires within 30 days after the effective date of this AD, revising the ALS of the operators' approved maintenance program (reference the TLM chapters 05-00-01 and 05-00-02 of the applicable EMs) to remove the requirement to record each touch-and-go or overshoot as \1/5\ of a FC on an engine installed on an airplane used for Pilot Training, and adding a requirement to record each touch-and-go or overshoot as 1 FC to the life of all critical parts and the fan blades. The MCAI requires that the revised method of life counting for each touch-and-go and overshoot be accomplished within 4 months.
- (2) The MCAI requires determining the total number of touch-and-go's and overshoots that each individual critical part (except the fan shaft and LP turbine rotor shaft) has experienced since entry into service. This AD only requires determining those numbers for touch-and-go's and overshoots that had occurred during Pilot Training.

# **Alternative Methods of Compliance (AMOCs)**

(i) The Manager, Engine Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

### **Related Information**

- (j) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2010-0077, dated April 20, 2010, and Rolls-Royce Deutschland Ltd & Co KG Alert Service Bulletin SB-BR700-72-A900504, Revision 1, dated February 19, 2010, for related information. Contact Rolls-Royce Deutschland Ltd & Co KG, Eschenweg 11, Dahlewitz, 15827 Blankenfelde-Mahlow, Germany; phone: 49 0 33-7086-1883; fax: 49 0 33-7086-3276, for a copy of this service information.
- (k) Contact Mark Riley, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: mark.riley@faa.gov; phone: 781-238-7758; fax: 781-238-7199, for more information about this AD.

# **Material Incorporated by Reference**

(l) None.

Issued in Burlington, Massachusetts, on October 7, 2011. Peter A. White, Manager, Engine & Propeller Directorate, Aircraft Certification Service.